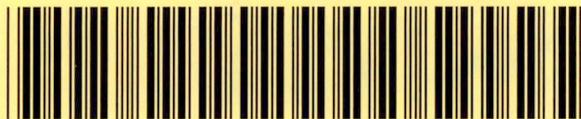


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Section SUPERFUND

Program IHS (IHS)

DocCat FACILITY

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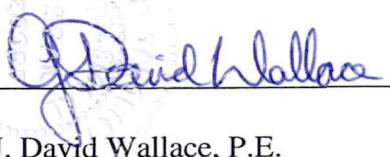
## PHASE II - REMEDIAL INVESTIGATION REPORT

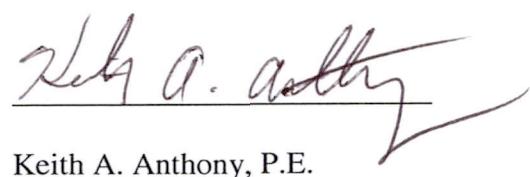
**COOPER TOOLS LLC – MONROE PLANT**

**3012 MASON STREET  
MONROE, NORTH CAROLINA**

**Prepared for:**

**Cooper Tools LLC  
North Carolina**

  
J. David Wallace  
J. David Wallace, P.E.  
Project Manager  
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Keith A. Anthony  
Keith A. Anthony, P.E.  
Principal Engineer  
Registered Engineer #NC 11260

**July, 2011  
Shield Project 1110051**



August 17, 2011

Bruce Parris, Western Regional Supervisor  
Inactive Hazardous Waste Branch  
Mooresville Regional Office  
610 East Center Avenue  
Mooresville, NC 28115

Subject: Cooper Tools, LLC Phase II  
Notification of Investigation  
Shield Project No. 1110051-01

Dear Mr. Parris:

Shield Engineering, Inc. (Shield) is providing this report and notification on behalf of Cooper Tools, LLC. As the result of a property transaction a Phase I Environmental Site Assessment was performed at the Cooper Tools, LLC site in Monroe, North Carolina. Subsequently a Phase II Environmental Site Assessment performed by Shield has indicated the presence of pollutants in excess of the North Carolina 2L standards.

Please find attached to this cover the report prepared by Shield for Cooper Tools, LLC. This report includes detailed description of the site geology and hydrogeology as well as the site history. In addition all data collected in completion of the Phase II has been included and summarized.

Please review the information included here and advise as to how the Inactive Hazardous Waste Branch (IHSB) would like for Shield and our client to proceed. Feel free to contact Bob Griffin or Dave Wallace at Shield for further discussion or if there are any questions.

Sincerely,  
Shield Engineering, Inc.

A handwritten signature in black ink that appears to read "Robert L. Griffin".

Robert L. Griffin, P.E.  
Senior Project Engineer

A handwritten signature in blue ink that appears to read "J. David Wallace".

J. David Wallace, P.E.  
Project Manager

A handwritten signature in black ink that appears to read "Keith Anthony / cut".

Keith A. Anthony, P.E.  
Principal Engineer  
Attachments



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- Appendix B Laboratory Analytical Reports
- Appendix C Geophysical Report

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## 1.0 INTRODUCTION

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### 1.1 SITE LOCATION

The Cooper Tools LLC - Monroe Plant is located at 3012 Mason Street, in Monroe, North Carolina (see Figure 1). The subject site is located in a mixed commercial, residential, and light industrial area on the east side of Monroe. The site consists of one generally rectangular-shaped parcel of land identified by Union County as Parcel Identification 09084005.

The site is located on a topographic ridge that declines in elevation toward a drainage feature that parallels Spud Smith Street, west and northwest of the site (see Figure 1). Surface water in this drainage feature is intermittent and flows toward the north. South of the site and north of Stitt Street the topography exhibits a slight decline and then rises to elevations in the vicinity of Stitt Street similar to those elevations at the site.

### 1.2 SITE HISTORY

In late 2009 a Phase I report was completed for this Plant. This report was made available to Shield Engineering, Inc. (Shield) by Cooper Tools LLC. Based on this report the following review of historical operations was assembled. Additionally, a list of recognized areas of concern can be found at the end of Section 1.3.

The earliest source of historical information reasonably ascertainable within the time frame of the Phase I Report was a 1961 aerial photograph that showed the subject site as vacant, open fields (possibly used for agricultural purposes). The production building was initially constructed in approximately 1969 and was occupied by Monroe Combining Company, a textile manufacturer, until approximately 1973. The plans for the initial buildings did not include the western portion of the building currently known as Bay #1. The architect for the original plant was Hodge/Von Dorn Partnership and the design engineer for these buildings was Harold McKnight, P.E., who passed away in March 2009. A review of these plans did not reveal the installation of any below-grade floor pits within the buildings. However, the plans did show an oil-water separator, with a

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subsequent water filter bed for discharge of the water from the separator. A leach field was also installed directly south of the separator and filter bed. Together all of these units were located in the area between Monitoring Well MW-4 and the building.

A review of the 1969 aerial photograph for the area clearly shows the construction of the Plant. However, a review of the 1976 aerial photograph for the area shows a disturbed area northeast of the Plant (see Figure 2). According to the Phase I Report, Monroe Combining Company was a textile manufacturer; however, historical research indicated that the former occupant was a manufacturer of farm machinery and equipment. Reportedly, the plant remained vacant for approximately 8 years, until the subject site was purchased by Cooper Tools LLC in 1981. Plans were also included at the Plant for an expansion of that portion of the building currently known as Bay #1. These plans had Monroe Combining Company identified on them and were dated 1981.

A review was conducted on May 6, 2011 of the available files located at the Plant. These files were reviewed in an effort to determine what solvents, if any, may have been used at the Plant in prior times. The following is a brief summary of the findings from this file review related to referencing within these files of specific chlorinated solvents.

In a questionnaire for chemicals present at the plant in 1988 both methyl-ethyl ketone and trichloroethane were identified as being used at the Plant. However, in a similar questionnaire for 1991, no solvents were listed. In 1989 no reporting was made under SARA Title III, as the volumes of toxic chemicals used at the Plant were stated to be below the reportable limits for these chemicals. In 1992, a chemical storage summary for the Plant listed the following chemicals: acetone, glycol ether, isopropylalcohol, methanol, methyl ethyl ketone, methylene chloride, sulfuric acid, toluene, and xylene. Additionally, in a 1992 letter to the then Union Memorial Hospital, methyl ethyl ketone, methylene chloride, toluene, xylene, and trimethylbenzene were all listed as being present at the Plant. In a subsequent list for 1993, only methanol was shown on this list.

In 1993 a wastewater pollutant checklist was completed as part of an application for a discharge permit and submitted to the local publicly operated treatment works (POTW). Within this checklist both tetrachloroethene and xylene were listed as being present at the Plant.

### **1.3 DESCRIPTION OF SITE**

The northern portion of the subject site is covered with grass, scattered trees and wooded land; the central portion of the subject site contains an employee parking lot and a training building; and the southern portion contains an employee parking lot and a single-story production building containing offices totaling approximately 286,500 square-feet and one corrugated metal, single-story training building consisting of approximately 5,100 square-feet. The production building is an irregularly shaped building and was constructed on a slab foundation and consisted of six manufacturing bays; a progressive press operation, waste treatment room, and maintenance shop (located within and collectively referred to as the Butler Building).

Through to early this year Cooper Tools LLC used the six manufacturing bays as follows: Bay 1 contained the forge material storage, casting foundry, and casting wheelabrator; Bay 2 contained the manual forge, wax room, and shell room; Bay 3 contained the annealing room; Bay 4 contained the trim and coin room, compressor room; and transformer substation room; Bay 5 contained the tool and die shop; and Bay 6 contained the auto forge room, finished goods and die storage room, and a transformer substation room. Today all of the equipment has been removed from the building. In addition to production areas, the building included office areas, product storage areas, a QA/QC laboratory, an employee break room and cafeteria, utility rooms, janitor supply rooms, and restrooms. Other outbuildings and structures located on the subject site include the generator plant, which comprised of two engines, two 1,250-gallon diesel fuel tanks, and two diesel powered generators located within two enclosed mobile trailers near the southeast corner of the subject site.

Cooper Tools LLC manufactured forgings, stampings, and castings for internal customers and finished horseshoes and pitching shoes for external customers. The plant utilized 10 different processes for forming metal, which include approximately 350 pieces of equipment. Steel was

the primary raw material utilized in the manufacturing process and was received onsite along the southern side of the production building. A variety of oils including rust preventatives, quenchants, diesel fuel, lubricant oil, hydraulic oil, engine oil, gear oil, and used oils were contained in 55-gallon drums, aboveground storage tanks (ASTs), and oil-containing equipment located within the production building. During the Phase I a total of approximately 63 ASTs were identified on the subject site ranging from 225 to 3,000 gallons.

Based on the Phase I report for the site, the following recognized areas of concern were previously identified in connection with the site:

- Substances historically used onsite may have included halogenated and non-halogenated solvents. The historical hazardous material management practices are unknown and may have been a potential source of subsurface contamination. Based on the Phase I report the former industrial operations represent a recognized area of concern to the subject site.
- In-ground pits were noted underneath one coining press; a furnace quench tank; and two progressive presses. The pits were constructed of concrete and while periodically cleaned out, it was not made clear that they are routinely inspected for cracks or breaches in the concrete. The machinery within the pits utilized various petroleum products and heat transfer products. Oil was noted within the pit associated with the coining press machine. The unknown integrity of the in-ground pits represents a recognized area of concern for the subject site.
- During the Phase I site visit oily spills, leaks, and stains on the concrete surface were observed throughout the production building; however, no significant cracks in the concrete floor were observed in the area of the staining.
- Staining was observed on concrete and asphalt-paved surfaces on the exterior of the building. Minor cracks in the concrete/asphalt-paved surfaces were noted in areas of the staining.
- Floor trenches located in areas throughout the plant were utilized as secondary containment. The trenches are located in the area of electrical discharge machine (EDM) fluid tanks; nine impactor forging machines; the air compressor room; the forge shop; and the waste treatment cleaning area. Waste streams in these areas consisted of hazardous substances and petroleum products, including but not limited to hydraulic oils, lubricating oils, motor oil, used oils, antifreeze, coolant oil, propylene glycol, and oily water. Based on the age of the building (approximately 1969), the potential exists for materials collected in the containment units to have potentially seeped through cracks in the concrete to the subsurface.

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- Rear loading dock area for used oils removed from the site and oils being delivered to the site.
- 1,200-gallon AST in the auto-forge area of Bay 6.
- Covered outside storage area for used parts and machinery.
- Waste treatment area.
- Two 1,200-gallon above-ground diesel storage tanks and a former 3,000-gallon above-ground storage tank.
- Bloomsburg Mills, located at 3000 Stitt Street, approximately 700 feet to the south-southwest of the subject site, is identified on the SHWS, IMD, UST, LUST, LUST TRUST, and FINDS databases. This property is located in an inferred hydrologically upgradient location from the subject site. Impacts of chlorinated solvents to groundwater were reported and the property is undergoing voluntary cleanup. Based on the plant's proximity to the subject site, inferred upgradient hydrologic location, and SHWS and LUST status, this property represents a recognized possible area of concern to the subject site.

The scope of work was designed to conduct further investigative work as follow-on from the Phase I previously prepared. In the Request for Proposal (RFP) Cooper Tools LLC initially proposed a series of sixteen well locations for further investigation around the complete property owned by Cooper Tools LLC. Shield in reviewing the scope of services for this site, proposed an initial round of eleven borings and monitoring wells located within the immediate parcel on which the Plant is located. Upon review of the results from this initial round, a second round of seven additional borings and monitoring wells were located based on the findings from the first round of monitoring wells.

Hence the Phase II investigative work presented herein includes the results for the 18 borings and monitoring wells installed as part of the Phase II remedial investigation for this site.

## **2.0 SITE INVESTIGATION PROCEDURES**

Investigations at this site were conducted in both soil and groundwater. This section describes the investigative procedures used for the soil and groundwater investigations. The drilling methods, well design, installation procedures, well construction materials, and boring logs are provided within this section.

### **2.1 INVESTIGATION PROCEDURES**

Soil borings were drilled at each of the monitoring well locations shown in Figure 3. Boreholes were drilled with a nominal 6-inch diameter air hammer bit to advance the borehole. The locations of the boreholes were the same as those proposed, except for Monitoring Well MW-2, (see Figure 3). This proposed monitoring well location was moved to the north, opposite the location of a pit located inside the Plant in Bay #1. During each soil and rock boring, samples were collected at 5-foot intervals. Samples of drill cuttings were assessed by an Organic Vapor Analyzer (OVA) for the presence of volatile organic compounds (VOCs). The purpose of these OVA measurements was to enable the preliminary field identification of the presence of VOCs within subsurface soils that may necessitate the addition of another monitoring well or moving a well location. Additionally, the presence of elevated OVA readings would also necessitate the collection of the drill cuttings for analysis in the laboratory.

### **2.2 GROUNDWATER INVESTIGATION PROCEDURES**

Groundwater monitoring wells were installed in each of the boreholes. The total depth of each of these boreholes was determined by encountering the presence of groundwater. The type of bedrock known to be present in this area is relatively unfractured and groundwater tends to be slow in entering boreholes and to recharge boreholes/wells. Therefore for each borehole the drilling was usually completed whenever water or moisture was first encountered. However, as expected many of the boreholes only had dust emanating from the borehole during the drilling. Hence, in these instances the borehole was advanced down to about the 20-foot depth and then the borehole was left open for a short period of time in order to determine the presence of groundwater. If groundwater was not evident after some period of time then the borehole was advanced a further 5 or 10 feet, in stepwise fashion till groundwater was encountered.

A total of 18 monitoring wells were installed in both rounds of drilling around the Plant site. The construction details for the monitoring wells are provided in Table 1. Boring logs were prepared for these monitoring wells and the description of the stratigraphy encountered in these monitoring wells is also provided on the boring log for each of the monitoring wells (see Appendix A).

The monitoring wells were constructed with a single PVC well casing with PVC well screen. PVC well screens are ten feet long, except for Monitoring Well MW-5, which was screened with a 15-foot long PVC well screen. The longer well screen was used in this monitoring well due to the difficulty determining the depth to groundwater at this location. The well screens were sanded within the annular space from the bottom of the borehole up to about two feet above the well screen. The top of the sand pack was capped with about two foot-thick zone of bentonite in the annular space. The wells were finished off with a grout seal in the annular space from the top of the bentonite up to ground surface.

The relative elevations of the wells and ground surface at each of the monitoring wells were surveyed; their locations are approximate and are shown on Figures 3 and 4.

In order to collect groundwater samples from each of the monitoring wells, the well was purged of a minimum of three volumes of groundwater measured in each well. However, due to the slow recharge into most of the monitoring wells, barely half of the wells (i.e., MW-1, MW-6, MW-9, MW-12, MW-14, MW-16, and MW-17) at the site were capable of sustaining sufficient recharge to enable the removal or purging of three well volumes of groundwater prior to the May 2011 sampling of the well. Only Monitoring Well MW-10 was unable to provide sufficient water for sampling during this sampling event. After purging the well, the groundwater sample was collected for shipping to the laboratory for analysis of the requested parameters.

## **3.0 FIELD AND LABORATORY QUALITY CONTROL AND QUALITY ASSURANCE PROCEDURES**

The field and laboratory quality control and quality assurance procedures used at the site are outlined in Sections 3.1 and 3.2, respectively.

### **3.1 FIELD**

Sampling events have been completed according to procedures and methods outlined in the following document:

- Region 4 Science and Ecosystem Support Division (SESD) Operating Procedure for Groundwater Sampling (SESD Operating Procedure) (EPA, 2007). The SESD Operating Procedure is part of the “Field Branches Quality System and Technical Procedures” document which contains field sampling and measurement procedures and quality control documents used by the two SESD Field Branches: the Ecological Assessment Branch and the Enforcement and Investigations Branch. The Field Branches Quality System and Technical Procedures series of procedures supersedes EPA’s Environmental Investigations Standard Operating Procedures Quality Assurance Manual (EISOPQAM);

The meters used to collect the field parameters were calibrated in the field as required per the manufacturer’s specifications. The following field parameters were collected during the purging of each monitoring well: pH, dissolved oxygen, oxygen reduction potential, specific conductivity, and temperature.

The groundwater sampling at the Site was performed with QA/QC procedures described below, and included the collection of equipment blanks, field blanks, and a duplicate sample. As indicated above, the sampling work was performed in a manner consistent with the SESD Operating Procedure and in Appendix A of the document entitled *“Registered Environmental Consultant [REC] Program Implementation Guidance”*. Field quality control groundwater samples consisted of the following: (i) a minimum of one (1) duplicate sample; (ii) an equipment rinsate blank of the tubing or bailer used for sampling groundwater; (iii) one VOC trip blank; and

(iv) one field blank per field day. Field blanks for groundwater samples consisted of distilled water used for equipment rinsing.

Preservatives were added to the empty sample containers by the laboratory prior to shipment to the Site. Water samples were preserved on ice to maintain a temperature less than 4 °C. Following the completion of a sampling event, the samples were wrapped in protective packing and placed into shipping containers. Each sampling container was transported with appropriate chain-of-custody documents attached with the shipping container. Each sampling container was securely sealed, clearly labeled and driven to the laboratory.

The chain-of-custody form is an accurate written record used to trace possession and handling of the samples from the moment of collection through laboratory analysis and the recording of the final result.

### **3.2 LABORATORY**

ENCO Laboratories, Inc. (ENCO) performed the laboratory analyses for the sampling event completed in both April and May, 2011. Laboratory reports include documentation of personnel, QA/QC, method detection limits, dilution factors, hold times, and analytical methodology. The quantification limits were at the EPA Method Detection Limits. The laboratory reports are included in Appendix B.

The proposed list of analytical methods was derived from the list of constituents identified within the Phase I report as follows:

- quenchants, spindle oil, lubricant oil, hydraulic oil, engine oil, gear oil, used oils, transmission fluid, antifreeze, diesel fuel, EDM oil, mineral spirits;
- halogenated and non-halogenated solvents;
- propylene glycol;
- mercury; and
- methanol.

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The water and soil samples were analyzed by USEPA Methods as follows:

- |  |                 |
|--|-----------------|
| • Volatile Organic Compounds (VOCs)      | Method 8260B    |
| • Methanol                               | Method 8015     |
| • Priority Pollutant Metals              | Various Methods |
| • Hexavalent Chromium                    | Method SM3500   |
| • Mercury                                | Method 7470A    |
| • Diesel Range Organics, ethylene glycol | Method 8015C    |
| • n-Hexane Extractable Material          | Method 1664A    |

During the investigation at this site, the drill cuttings from all of the soil borings and monitoring wells were retained and stored at the Site for future sampling for disposal purposes. Development water from the development of each of the monitoring wells was retained in drums at the site. Additionally, during the sampling event purge water from the monitoring wells was also retained and stored at the Site for future sampling for disposal purposes. Materials classified as investigation-derived waste (IDW) at the Site included the following:

- personal protective equipment (PPE), which included disposable Tyvek™ coveralls and nitrile gloves;
- soil cuttings from soil borings;
- drill cuttings from well installations;
- water from well drilling;
- disposable equipment which included rope, tubing, miscellaneous sample jars/containers, and the like;
- purge water from well sampling; and
- decontamination wash water, solvents, and rinse water.

All IDW was containerized in appropriate containers at the Site for temporary storage. As drilling progressed for each of these wells the material recovered from the borehole included groundwater and cuttings from the bedrock. These materials were retained inside a plastic lined pit around the well head. The water was pumped from these pits into drums for the storage of the recovered groundwater. The cuttings recovered from these pits were also removed and placed into 55-gallon drums. These drums were grouped together and are currently retained in northeast corner of the

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parking lot, for future disposal. There are a total of 46 drums of drill cuttings, one drum of plastic discarded from the sampling event, and six drums of drill water, development and purge water from the sampling of the monitoring wells are stored at the site. The disposal of these drums is dependent on the analytical results from the groundwater samples collected from the monitoring wells.

## 4.0 GEOLOGIC CONDITIONS

Section 4 provides a description of site geologic conditions, with an overall regional description of the geology outlined in Section 4.1 and the local geology described in Section 4.2.

### 4.1 REGIONAL GEOLOGY

The Site is located in the Piedmont Physiographic Province (Piedmont), an area underlain by ancient igneous and metamorphic rocks. These rocks commonly have a mantle of residual soil (also known as residuum) overlying the bedrock (LeGrand, 1988). The Piedmont is a generally northeast-trending physiographic province. This province is primarily underlain by several geologic zones or belts of plutonic rocks and low-grade to high-grade metamorphic rocks. Geologists have subdivided the Piedmont into four parallel geologic belts from east to west: Carolina Slate, Charlotte, King's Mountain, and Inner Piedmont. The site is located in the Carolina Slate Belt, a northeast trending band of volcanic, sedimentary, and metamorphic rocks that extend from central Virginia, across North and South Carolina and into eastern Georgia within the eastern and central Piedmont (Floyd, 1965; Hibbard and others, 2002). The group of related formations within this belt comprises the Carolina Terrane, which consists of low-grade meta-igneous and associated meta-sedimentary rocks (NCDWQ, 2009).

The Carolina Terrane is comprised of four meta-volcanic-dominated sequences: the Albemarle sequence in North Carolina; the South Carolina sequence in South Carolina and southeast Georgia; and the Cary sequence in eastern North Carolina. The area of the site is within the Albemarle sequence that is interpreted to have formed above the continental crust during the Neoproterozoic through the Cambrian Eras. Within this sequence is the Albemarle Group consisting of interbedded meta-mudstones and meta-siltstones (argillites) with lenses of felsic tuff. The Cid Formation portion of this group underlies the site proper and is characterized by thicker-bedded versions of these rocks containing more felsic and mafic volcanic members than underlying formations of the Albemarle Group (Tillery and Uwharrie) (NCDWQ, 2009; Hibbard and others, 2002; Brown and Parker, 1985; Randazzo, 1972).

Structurally the Carolina Terrane rock series have been folded in a series of northeastern-trending major and minor synclines and anticlines that show several minor faults and displacements (Goldsmith and others, 1988; Randazzo, 1972). The Troy anticlinorium, extending from central Randolph County through Union County into South Carolina, is a major structural feature defining the regional geology in the vicinity of the site. These larger structures have wavelengths of ten to fifteen miles, and within them are sub-series of smaller synclines / anticlines (defining the anticlinorium term) all created from the same deformational compressive forces that created the major structures. There are two major faults in the area (Brown and Parker, 1985; Floyd, 1965); ten miles to the west is the Gold Hill Fault and 18 miles to the east is the Jonesboro Fault.

The virgin soils encountered in this area are the residual product of in-place chemical weathering of rock, which was similar to the rock presently underlying the Site. In areas not altered by erosion or disturbed by human activities, the typical residual soil profile consists of clayey soils near the surface, where soil weathering is more advanced, underlain by sandy silts and silty sands. The boundary between soil and rock is gradational. These residual soils retain a relic structure within their cross-section and can be identified in soil borings. This gradational zone is termed "partially weathered rock" and is normally found overlying the parent bedrock. Partially weathered rock is defined, for engineering purposes, as residual material with standard penetration resistances in excess of 100 blows per foot. Weathering is facilitated by fractures, joints and by the presence of less resistant rock types. Consequently, the profile of the partially weathered rock and hard rock is quite irregular and erratic, even over short horizontal distances. Also, it is not unusual to find lenses and boulders of hard rock and zones of partially weathered rock within the soil mantle, above the general bedrock surface. The uppermost soils within the flood plains of streams often are alluvial (water-deposited) materials.

## **4.2 SITE GEOLOGY**

Two thirds of Union County, including the site area, is underlain by rocks and related overlying weathered residuum of the Cid Formation. The interbedded meta-mudstones and meta-siltstones (argillites) with lenses of felsic tuff rocks of this formation are moderately indurated highly compact sedimentary rock types of volcaniclastic to pyroclastic origin that have been slightly metamorphosed to at least greenschist facies. These rocks consist largely or wholly of particles of

clay or silt but lack the level of induration/fissility of shale or the cleavage characteristic of the more metamorphic slate. Within these rock layers is the presence of felsic tuff lenses. Some recent authors have interpreted this portion of the Cid Formation underlying the site to be the “mudstone member”. It is our opinion that due to the documented metamorphic facies for the formations present and observed rock material in the borings that the rock descriptions including “meta-sedimentary” and “argillaceous” terms used herein are appropriate versus mudstone and therefore will be preferentially applied. Within the joint/fracture planes diagenetic or metamorphic pyrites are present as laths, granules, crusts, or disseminated in the rock (NCDWQ, 2009).

Structurally, based on Goldsmith, Randazzo, and others (1988, 1972) the site is located near the northwestern limb of the Troy Anticlinorium, the most extensive structural unit in the area. Due to the presence of smaller syn-and anticlinal structures in the area, and based on publications for nearby study areas (NCDWQ,2009), fracture/joint/bedding planes at the Site would be expected to have varying dip directions that would range from near horizontal to greater than 70 degrees. In addition, multiple joint and fracture sets are present in the site area based on boring descriptions, and review of LiDar (Light Detection and Ranging) data for the site area showing extensive lineations with orientations in the northeast-southwest, east-west, and north-south directions many of which are, as would be anticipated, associated with surface water features. The LiDar data indicate minimal lineations on the site proper, with the most dominant ones located in the southern quarter of the site parcel.

All of the monitoring wells installed at the Site were finished in bedrock. Some of these wells penetrated seams of soft bedrock before encountering hard bedrock (see Appendix A). The depth to hard bedrock at the Site ranges from 5 to more than 45 feet below ground surface and averages about 21 feet below ground surface. Because of the shallow depth to bedrock, the wells had to be drilled with an air rotary drill rig.

## 5.0 HYDROGEOLOGIC CONDITIONS

This section describes the hydrogeologic conditions in the region and at the site, with an overall regional description of the hydrogeology outlined in Section 5.1 and the local hydrogeology based on site specific data is described in Section 5.2. Current uses of the groundwater in the area are described herein. The depth-to-groundwater measurements the groundwater elevation data are presented in Table 2. Groundwater elevation contour map for the aquifer underlying the site, with groundwater flow patterns is included.

### 5.1 REGIONAL HYDROGEOLOGY

Average precipitation for most of the Piedmont is approximately 45 inches per year, which is fairly evenly distributed throughout the year (LeGrand, 1988). Drainage is facilitated by a close or tight network of perennial streams (LeGrand, 1988). Within the Piedmont several distinguishing factors differentiate the hydrogeology of this physiographic province from the hydrogeology of other provinces.

The first factor is the relative unimportance of stratigraphy for determining presence of ground water within the Piedmont. Typically, most physiographic provinces exhibit a strong relationship between stratigraphic units and the presence of ground water (e.g., Atlantic Coastal Plain). However, semblages of stratigraphic units are not widespread and the term "hydrostratigraphic unit" can only be awkwardly applied in the Piedmont (LeGrand, 1988). Nevertheless ground water does occur in the Piedmont and does circulate within the hydrogeologic system (LeGrand, 1988).

The geologic setting for the region around Union County is described in Section 4. A characteristic feature of the Piedmont is the prevailing mantle of residual soil and saprolite that covers the bedrock in most places (LeGrand, 1988). This mantle varies in thickness and, in a sense, represents a special geologic unit that crosses various types of underlying rock (LeGrand, 1988). The saprolite is characterized as a clay-rich unconsolidated material that retains the relic structure of the bedrock (LeGrand, 1988). Therefore, this mantle is a true hydrogeologic unit that has an important role to play with respect to ground water in the Piedmont (LeGrand, 1988). In

general, a thick soil and saprolite zone suggests that the underlying rock is fractured, while a thin soil and saprolite zone suggests less than normal fracturing and, therefore, lower than normal hydraulic conductivity.

A second factor that distinguishes the Piedmont from other provinces is the fracture-type permeability that characterizes the rock (LeGrand, 1988). The presence of fracturing within the bedrock transcends the type of rock and there is only a moderate range in the degree of fracturing, according to the type of rock (LeGrand, 1988). The mantle of residual soil and partially weathered rock that covers the underlying fractured bedrock in most places provides an intergranular medium through which recharge and discharge of water from the fractured bedrock commonly occur. Therefore, ground water flow within the saturated subsurface can be characterized by a composite two-media system that consists of intergranular medium overlying fractured bedrock. Both the rocks and consolidated sedimentary deposits of the Piedmont tend to be fractured to some extent, usually no deeper than several hundred feet below ground surface (LeGrand, 1988). These fractures and other secondary openings are the primary avenues for movement of ground water in the bedrock. Unweathered and unfractured rocks have low porosity and low hydraulic conductivity (Heath, 1980). Therefore, the quantity of ground water that the bedrock can transmit to wells is determined by the density, capacity, and interconnectivity of these fractures and other secondary openings. Groundwater movement in the metamudstone/argillite portion of the Cid Formation appears to be mainly along bedding planes, joints, and fractures (DWQ, 2009).

The characteristics of fractures within the bedrock can be described in terms of both distribution and relationship with depth below ground surface. For example, fracture distribution can be represented by evenly and closely spaced fractures unevenly and sparsely distributed fractures, or unevenly spaced and elongated fractures. Most fractures exhibit a decrease in size and number with increasing depth below ground surface, though some fractures can extend to considerable depth (LeGrand, 1988). Because of the decreased density of fractures with increasing depth, the base of the ground-water system is indistinct, but within the Piedmont generally fractured rock grades into unfractured rock below the 300-foot depth (LeGrand, 1988). Therefore, the uppermost fracture patterns are usually more representative of the effects of weathering in those

areas unaffected by structural features. However, of the total population of fractures, only a subset of fractures is capable of transmitting ground water.

The principal source of ground water from wells tapping a fractured rock is those fractures intersected by the well borehole. Certain structural, stratigraphic and topographic features are associated with increased fracturing of the rock, which influences well yields. However, over the long term wells tapping fractures, no matter how large the initial yield, can withdraw water only at the rate the water is recharged to the features. The water stored in the overlying saprolite and soil is the principal source of recharge to the fractured bedrock. The ground water in the saprolite and fractured bedrock is hydraulically connected and therefore can be described as contiguous (Heath, 1989).

Brackett et al. (1991) concluded that areas of fractured and highly weathered rock are frequently expressed topographically as valleys and draws, which serve to trap and channel water. The lower elevations within valleys and draws have the best potential for water-producing fractures and, in many cases, a thick soil/saprolite (or alluvium) acting as a ground water reservoir for recharge to the bedrock.

LeGrand (1988) provided a third factor unique to Piedmont hydrogeology – a surface drainage basin that contains a perennial stream (i.e., flows year round) represents an entity that is useful for descriptions of ground-water conditions. Each drainage basin, in a general way, is a unit that is isolated from, yet is similar to, the adjacent drainage basins (LeGrand, 1988).

Topographically dependent flow models first espoused by Toth (Freeze and Cherry, 1979) can best describe the ground water flow in the Piedmont. The upland slopes (e.g., ridges and hilltops) are recharge areas, whereas rivers and creek beds represent discharge areas for ground water. Hence the water table is a somewhat subdued reflection of the topography (LeGrand, 1988). Wherever ground water discharges to a surface stream on a continuous basis the stream is defined as a perennial stream. Similarly intermittent discharge by ground water to ground surface creates an intermittent stream (i.e., only flows on occasions, such as after rainfall events or during seasonal high water tables in the late winter to early summer). Springs can occur in upland areas

under certain conditions, such as thin soil mantle, or presence of shallow confining horizons (e.g., clay).

The annual cycle for ground water elevations exhibits the lowest ground-water elevations in the fall (typically October) and the highest ground water elevations in the spring, just before leaf-out of the vegetation (typically April).

In general adequate supplies of ground water are available for domestic users and in some cases, even industrial and municipal supply in the area around the Site (Floyd, 1965). Data on 135 water supply wells in the area indicate that the well yield per foot decreases for wells with a depth of more than about 150 feet below ground surface (Floyd, 1965). The average yield for these wells is 14.1 gallons per minute (gpm) and the average depth is 138 feet below ground surface. The total depth for each of these wells ranges from 33 to 397 feet below ground surface. Only six wells of these wells have depths exceeding the 300-foot depth below ground surface (Floyd, 1965).

The best yields have been obtained from wells drilled in draws or valleys (Floyd, 1965). Because of its areal extent the tuffaceous argillite is the most important aquifer in the area around the Site. However, within Union County the average well yield in tuffaceous argillite (i.e., 0.08 gpm per foot of drilled well) was the lowest compared to the average well yields for the other rock types in the county (0.09 – 0.74 gpm per foot of well drilled) (Floyd, 1965).

Groundwater is currently used for private residential water supply in the area beyond the City of Monroe water supply distribution system. There are no well head protection areas designated in the area around the Site.

## **5.2 SITE HYDROGEOLOGY**

The Site is located on the top of a gently sloping north-south trending topographic ridge (see Figure 1), approximately four miles east of Monroe, North Carolina. Therefore, based on both the topography around the Site and the conceptual understanding of the regional hydrogeology, the projected ground water surface at the Site is expected to exhibit a ground water flow direction

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generally toward the north and/or northwest, similar to that for surface water runoff as indicated by the slope of the ground surface at the site.

As outlined in Section 2.2, a total of 18 monitoring wells have been installed around the Site. More than half of the monitoring wells go dry when pumped.

The depth to groundwater measurements were collected in both April and May, 2011. Hence together these data were able to indicate that most of the groundwater elevations in these wells had stabilized and hence the collected groundwater depth measurements are representative of groundwater conditions at the site, except for Monitoring Well MW-18. The depth to groundwater measurements collected at the site on April 11, and May 24, 2011 are shown in Table 2. The average depth to groundwater underlying this site is 23.1 feet below ground surface. For those eleven monitoring wells measured on April 11, and May 24 the average depth to groundwater increased from 17.1 to 19.5 feet below ground surface. The groundwater in only one well (i.e., MW-18) was not considered to have stabilized by May 24.

The lateral movement of groundwater is defined by groundwater contours shown on the groundwater contour maps. Groundwater elevations were interpolated between monitoring wells by comparing the groundwater elevations at those locations, considering both site features and topography (see Figure 5). Overall, the groundwater contours mimic the topography for the area. Hence these groundwater data are consistent with the conceptual understanding for the hydrogeologic system underlying the Site as described in Sections 4 and 5.1.

Based on the groundwater potentiometric map the direction of groundwater flow is generally toward the north/northwest, however in the northern portion of the Site the direction for the groundwater flow is toward the northwest and in the southern portion of the Site the direction of groundwater flow ranges from toward the north through to the west.

## 6.0 ANALYTICAL RESULTS

This section tabulates the analytical results for the sampling completed at the site. Copies of the laboratory reports, including QA/QC documentation are included in Appendix B.

### 6.1 SOIL RESULTS

The OVA field readings collected during the drilling of the 18 boreholes ranged from 1.31 up to 357 parts per million (ppm). The elevated OVA field reading of 357 ppm was encountered at the 5-foot depth during the drilling of the borehole for Monitoring Well MW-5. The soils at this depth were clearly darker in color, compared to natural soil colors encountered in the other boreholes drilled across the site. However, because of shallow damp organic soils (at about the 5-foot depth) oozing into this borehole and potentially impacting the chemical integrity of the groundwater in the borehole, a second borehole had to be drilled ten feet from the first borehole. Those dark colored soils were not encountered at this second borehole. A second elevated reading of 193 ppm was encountered at the 30-foot depth in Monitoring Well MW-9 (i.e., at the bottom of the borehole).

The OVA readings for the rest of the drill cutting samples collected from boreholes across the site ranged from 1.31 to 38.7 ppm. These readings are relatively typical for background soils.

Based on these OVA readings a soil sample was collected from the 5-foot depth at the location of the first borehole at the Monitoring Well MW-5 location. This soil sample consisted of the dark colored soil and was analyzed for VOCs. The analytical results for this soil sample are summarized in Table 3. Only VOCs detected are identified in the laboratory analytical report are shown in Table 3.

The VOC data for this soil sample were compared to the North Carolina Inactive Hazardous Sites Branch (IHSB) soil Remediation Goals (RGs). None of the VOCs exceeded these IHSB soil RGs.

## **6.2 SURFACE GEOPHYSICS**

This section describes the applicable procedures used to conduct the electromagnetic terrain conductivity survey (referred to as the geophysical survey or survey) for the areas both northeast, northwest and south of the Site. The survey was performed by Grumman Exploration on May 6 and 7, 2011. The results are summarized below. The survey is described in *Report of a Geophysical Survey at the Cooper Tools LLC – Monroe Plant Located at 3012 Mason Street in Monroe, North Carolina*, (the Report) which is included in Appendix C.

The geophysical survey was performed in the area shown on Figure 1 included in Appendix C. The survey consisted of establishing a survey grid over the two accessible areas indicated in Figure 1 (i.e., those areas referencing other Figures in the Report: see Appendix C), and then conducting the geophysical survey. Both the south investigation area and the northeast investigation area shown in Figure 1 (see Appendix C) were surveyed with a series of widely separated (i.e., depending upon vegetation) linear transects. The survey was conducted in accordance with the following technical specifications:

- GSSI GEM-300 instrumentation (2 to 3 survey frequencies for GEM-300, including 9.8 KHz – same as used by the mono-frequency EM-31; considered to be the industry standard);
- measure quadrature/conductivity and in-phase metallic response;
- vertical dipole coil orientation, single coil alignment;
- continuous (time-based) data acquisition mode using fixed reference locations (will result in ~2.2-ft in-line station spacing); and
- transect spacing was an approximately 5-foot transect spacing within accessible areas, as required to meet the survey objectives.

Figures illustrating representative Site conditions with color contour overlays of the electromagnetic measurements and diagrams with interpretations are included within the Report. Unless otherwise noted, the references to Figures below are to those Figures contained in the Report in Appendix C.

No anomalous strong EM conductivity responses were observed across the areas surveyed neither north nor south of the Site (Figure 1; see Appendix C), except for a metal unit located just off the northwest corner of Bay #1 of the Cooper Tools LLC – Monroe Plant (see Figure 3; see Appendix C). A series of survey transects were conducted through the woods east from Monitoring Well

MW-9 and through the area between the southern boundary of the Cooper Tools LLC – Monroe Plant and Stitt Street. The terrain conductivity levels across these areas of the Site are commensurate with the anticipated range for natural, undisturbed earth materials that are commonly encountered in this area of North Carolina.

Because the EM in-phase response is most sensitive to highly conductive targets, strong positive in-phase measurements are often associated with buried metal objects or vessels. In the area south of Monitoring Wells MW-3 and MW-4 some slightly elevated EM responses were evident (see Figure 1; see Appendix C) but were considered to be reflective of increased percentages of clayey soils and/or moisture in the subsurface soils in this area. These areas did not warrant further investigations.

Closer to the building and parking areas, it should be noted that there were electrical interference sources during the survey such as the fences, vehicles, buried pipes, signage, reinforced concrete walkways and aprons. Consequently, the EM results within these limited areas were rendered less conclusive with regard to the interpreted presence or absence of buried metal objects in this area. In general, electrical interference from various sources is apparent on the contour diagrams (see Figures 3 and 5; see Appendix C). In summary the only buried metal object encountered during the geophysical survey was located at the northwest corner of Bay #1 (see Figure 3; see Appendix C).

### **6.3 GROUNDWATER RESULTS**

The analytical results for the groundwater samples are summarized in Table 4. Only detected VOCs that are identified in the laboratory analytical report are shown in Table 4. These groundwater analytical data are compared in Table 4 to the Title 15A North Carolina Administrative Code Subchapter 2L Groundwater Standards (NC 2L groundwater standards). The full list of the VOCs that were analyzed is shown in the laboratory analytical reports included in Appendix B. However, all of the analytical results for the metals analyzed and other constituents analyzed are included in Table 4. All of the field parameters collected during the sampling event are also included on Table 4. The analytical results for the duplicate sample are also included in Table 4, adjacent to the analytical results from the same monitoring well. The

analytical results for the duplicate samples exhibited a good comparison with the analytical results for the groundwater sample from the same monitoring well.

The analytical results for the other QA/QC samples (i.e., field, rinse and trip blanks) collected during the sampling event are included with the laboratory results. The only VOC that was identified in any of the blanks during the April sampling event was carbon disulfide. This VOC was not found above the NC 2L groundwater standard (i.e., 700 micrograms per liter [ug/l]) in the field, rinsate, and trip blanks collected during the groundwater sampling event. No VOCs were identified in any of the blanks for the May sampling event.

A comparison of the May 2011 analytical results indicate that groundwater from 14 of the 18 monitoring wells installed at the site exhibit exceedances of the NC 2L groundwater standards. The only four monitoring wells without any NC 2L exceedances for VOCs are Monitoring Wells MW-2, MW-3, MW-5, and MW-12. Two of these monitoring wells (MW-2 and MW-12) are located at the west side and north side of Bay #1 in the Plant (respectively), adjacent to Spud Smith Street and downgradient from the Cooper Tools LLC – Monroe Plant. The other two monitoring wells are located along the south side of the Cooper Tools LLC – Monroe Plant (MW-3) and the southeast corner of the site adjacent to the propane tank (MW-5).

#### **6.4 INTERPRETATION OF GROUNDWATER RESULTS**

The groundwater analytical data shown in Table 4 is discussed in regard to three separate issues evident in the groundwater underlying this site, based on a review of these data in this table. The first two issues evident in this data set are the presence of trichloroethane and tetrachloroethene. Both of these constituents typically degrade in the subsurface environment and each has a series of specific daughter products that together are collectively labeled as halogenated alkanes and halogenated alkenes, respectively. All of the VOCs that exceed the NC 2L groundwater standard for the May 2011 sampling event belong to one of these two groups of VOCs (i.e., halogenated alkanes and alkenes). The third issue evident in this May 2011 data set is the presence of several metals exceeding the NC 2L groundwater standards in two wells: one at the rear of the plant (MW-6) and the other in the woods north of the Plant (MW-18) (see Figures 3 and 4). Some gasoline range organics are evident at this latter monitoring well (MW-18) above the NC 2L groundwater standards.

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The total VOCs shown in Table 4 exhibit the highest total VOC concentrations in Monitoring Well MW-9; with a concentration of 9.78 milligrams per liter (mg/l). At this location these VOCs are made up of two groups of halogenated compounds: alkanes and alkenes. The alkanes consist of 1,1,2-trichloroethane and the associated daughter products (i.e., dichloroethanes and chloroethane). The alkenes consist of tetrachloroethenes and the associated daughter products (trichloroethenes, dichloroethenes, and vinyl chloride). Hence, the VOCs at this site are reviewed in the context of these two groups of halogenated compounds.

### **Halogenated Alkanes**

The total concentrations for the halogenated alkanes for the May 2011 sampling event are shown for the wells at the site in Figure 6. Trichloroethanes are synthetic solvents widely used in industrial processes and these are naturally reduced within an anaerobic environment to dichloroethanes and then to chloroethane. Additionally, several of the dichloroethanes have also been used as solvents. The concentration for each of these alkanes is shown for each of the eighteen monitoring wells with the NC 2L groundwater standard.

The isoconcentration lines shown on Figure 6 indicate the alkanes are largely present north from the Plant, except for one alkane each (i.e., exceeding the NC 2L groundwater standard) in Monitoring Wells MW-14 and MW-15, adjacent to the Plant. The likely source area for these alkanes appears to be in the general vicinity of Monitoring Wells MW-9 and MW-18. Most of the alkanes were evident in both Monitoring Wells MW-9 and the potentiometrically downgradient monitoring well from Monitoring Well MW-9 (i.e., MW-10). However, only 1,1-dichloroethane is present in Monitoring Well MW-18. Hence, the two monitoring wells located in the likely source area exhibit different mixes of alkanes. There exists the possibility of two separate source areas for the alkanes in this north area of the site.

A review of the field parameters for the May sampling event at Monitoring Well MW-9 indicates relatively low oxygen concentration and negative oxidation reduction potential (ORP) indicating ongoing anaerobic degradation (see Table 4). However, for the May sampling event at Monitoring Well MW-18 indicates relatively high oxygen concentration and negative oxidation reduction potential (ORP) indicating limited anaerobic degradation (see Table 4). Therefore the groundwater regime in this area (i.e., Monitoring Well MW-18) of the site has not evolved into a

significant reducing environment at this time, compared to the area around Monitoring Well MW-9. Over time these parameters will slowly decline, with the ORP slowly declining toward the negative hundreds, as the subsurface environment becomes more reducing.

Based on the groundwater contours shown on Figure 5 the groundwater at Monitoring Well MW-10 is from the same general area of Monitoring Well MW-9. Also, the total VOC concentrations at Monitoring Well MW-10 are lower than those at Monitoring Well MW-9. Together these data indicate that the source area for these alkanes and their degradation products are either located in the general vicinity of Monitoring Well MW-9 or further upgradient from this well.

A review of the aerial photograph taken in 1976 (see Figure 2), reportedly three years after Monroe Combining Company left this site, clearly shows a triangular area of disturbed soil immediately south of Monitoring Well MW-9. Monroe Combining Company was reportedly a manufacturer of farm machinery and equipment.

### Halogenated Alkenes

The total concentrations for the halogenated alkenes for the May 2011 sampling event are shown for the wells at the site in Figure 7. Tetrachloroethene and trichloroethene are synthetic solvents widely used in industrial processes. Similar to the halogenated alkanes, these are naturally reduced within an anaerobic environment to trichloroethene, then to dichloroethenes and then to vinyl chloride before reducing to harmless ethenes and ethanes. The concentration for each of these alkenes is shown for each of the eighteen monitoring wells with the corresponding NC 2L groundwater standard on Figure 7.

Based on the isoconcentration lines for total alkenes shown on Figure 7 these constituents are more widespread than the alkanes (see Figure 6). The alkenes are evident both in the vicinity of the plant itself and also in the area north of the plant. Together these data indicate that there are several possible source areas for these alkenes. These possible source areas include those areas in the general vicinity of Monitoring Wells MW-4, MW-15, MW-9 and a suspected offsite source evident at Monitoring Well MW-1.

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The area immediately north from Monitoring Well MW-4 is the general location of the leach field and filter tank installed as part of the original Monroe Combining Company's plant in 1969. Therefore the source for the alkenes evident in Monitoring Well MW-4 is suspected to be from these former wastewater process units.

Based on the total alkene concentration for the area around Monitoring Well MW-15 there does appear to be a source area for alkenes near this monitoring well, based on the lower total concentrations at Monitoring Well MW-7, which is located upgradient from Monitoring Well MW-15. At this time the nature of any source area near Monitoring Well MW-15 is unknown.

A third source area for alkenes is evident in the area around Monitoring Well MW-9. This monitoring well exhibits the highest total VOC concentrations for the site. Additionally, this well is thought to have a nearby source area for halogenated alkanes. The location of Monitoring Well MW-9 adjacent to the woods (see Figure 4) suggests that the source may be a result of the disposal of waste products in this area.

Based on the elevated total concentrations for alkenes in Monitoring Wells MW-1 and MW-8, (together these two wells exhibit total alkene concentrations higher than anywhere else at the site, except for Monitoring Well MW-9. However, Monitoring Well MW-9 is not upgradient from either of these two monitoring wells. The total alkene concentrations for those monitoring wells upgradient from Monitoring MW-1 are both non-detect for alkenes (MW-2 and MW-12). Similarly, the total alkene concentrations for the monitoring well upgradient from Monitoring MW-8 (i.e., MW-14) is an order of magnitude lower than the total concentration for alkenes at Monitoring Well MW-8. The other important characteristic of Monitoring Well MW-1, is that this monitoring well intersected good water-producing fractures, unlike Monitoring Well MW-2. These data suggest that the fractures intersected in Monitoring Well MW-1 are well-connected to the likely fracturing usually evident under streams within the Piedmont hydrogeology (see Section 5.1). Therefore, the presence of alkenes in Monitoring Well MW-1 is considered to be from a potentiometrically upgradient source. The upgradient direction from Monitoring Well MW-1 is in a southerly direction.

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Bloomsburg Mills Facility is located south from this area (see Figure 4). Additionally, a file review for this facility indicated that the dominant constituent of concern at this site is tetrachlorethene. This constituent was previously stored in an above-ground storage tank on the south side of Stitt Street, opposite Spud Smith Street and was used for dry cleaning operations at this facility from 1963 through to 1978. A recent analysis of groundwater in the near vicinity of this former tank location had exhibited 40,500 micrograms per liter (ug/l) for tetrachloroethene.

A wastewater aeration lagoon used by this facility was formerly located immediately west of Spud Smith Street and north of Stitt Street (see Figure 4). This former aeration lagoon was closed during the winter of 2009-10. A monitoring well recently installed at the site of this former lagoon had exhibited a tetrachloroethene concentration of 30,300 ug/l and a total VOC concentration of 34,736 ug/l.

Therefore, the presence of alkenes immediately south and west from the Cooper Tools LLC – Monroe Plant is considered to be a source of the alkenes in Monitoring Well MW-1, and also, at least some of the alkenes in Monitoring Well MW-8.

### **Metals**

The last issue that is evident from the May 2011 data shown in Table 4 are the metal concentrations that exceed the NC 2L groundwater standards for metals at five monitoring wells (i.e., MW-6, MW-7, MW-8, MW-10, and MW-18: see Figure 8).

Monitoring Well MW-6 is located immediately south of the spill containment pit and adjacent to the channel that conveys stormwater from the pit to the stormwater outfall #002. A total of seven metals were found to exceed the NC 2L groundwater standards, with arsenic, chromium and lead concentrations being one or two orders of magnitude greater than the NC 2L groundwater standard (see Table 4 and Figure 8).

Similarly, but separate Monitoring Well MW-18 is located in a low area within the woods in the north half of the site. A total of six metals were found to exceed the NC 2L groundwater standards, with arsenic, chromium and lead concentrations being one order of magnitude greater than the NC 2L groundwater standard. The possible source for these metals is unknown, but may

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result from the possible disposal of wastes in the area, as there were discarded debris scattered in the area.

The other three monitoring wells (MW-7, MW-8, and MW-10) also exhibit one, two or three metals that exceed the NC 2L groundwater standards (see Figure 8). In each instance these same metals were not detected above the NC 2L groundwater standard during the April 2011 sampling event, except for thallium in Monitoring Well MW-10. Monitoring Well MW-10 had insufficient water for sampling in May 2011.

## 7.0 CONCLUSIONS AND RECOMMENDATIONS

This section outlines the conclusions and recommendations for this site based on the findings of this Phase II investigation

### 7.1 CONCLUSIONS

The following conclusions summarize the investigation of the Site to date. These conclusions are based on the data collected as part of this Phase II investigation and are as follows:

- The average depth to bedrock underlying the site is 21 feet below ground surface;
- The average depth to groundwater underlying the site is 23 feet below ground surface;
- Soil cuttings at the site collected during drilling did not exhibit elevated OVA field readings and the laboratory analysis for the soil sample that exhibited the highest OVA reading did not exhibit any exceedances of the IHSB soil RGs;
- During both the drilling and the groundwater sampling more than half of the monitoring wells were slow to recharge groundwater following the borehole/well evacuation, which is typical for the bedrock underlying this area of Union County;
- The limited presence of groundwater in the bedrock, hence limited fracturing in the bedrock, underlying this area suggests slow moving groundwater within the bedrock underlying the site;
- Surface geophysics using electromagnetic instrument did not identify the presence of buried metal objects, such as drums in the areas investigated both north and south of the Cooper Tools LLC – Monroe Plant;
- Fourteen of the eighteen monitoring wells installed at the site exhibit VOCs that exceed the NC 2L groundwater standards, ranging from two VOCs (MW-11, MW-7, and MW-18) up to six VOCs (MW-10 and MW-15);
- The VOCs present in groundwater underlying the site belong to one of the two separate halogenated families of solvents (i.e., alkanes and alkenes);
- Based on the May 2011 sampling event (April 2011 sampling event for MW-10) the alkanes are not detected in Monitoring Wells MW-2, MW-3, MW-4, MW-5, MW-7, MW-8, MW-12, and MW-13;

- Based on the May 2011 sampling event (April 2011 sampling event for MW-10) the alkenes are not detected in Monitoring Wells MW-2, MW-3, MW-5, and MW-12;
- Arsenic, chromium and lead were found to exceed the NC 2L groundwater standards in Monitoring Wells MW-6 and MW-18 at concentrations at least one order of magnitude above these standards;
- Possible source area for the alkanes evident in Monitoring Wells MW-9, MW-10, and MW-18 is either in the vicinity of MW-9 or further upgradient from this well (i.e., southeast of MW-9). The area south of MW-9 was disturbed prior to an aerial photograph taken in 1976. The possibility is present for two separate source areas for alkanes in this north area of the site;
- Possible source areas for the alkenes evident in Monitoring Wells MW-1, MW-4, MW-8, MW-9, MW-10, and MW-15 consist of; the former leach field at the rear of the Plant (MW-4); the area around MW-15; the area around MW-9; and an offsite source south of the Plant at Bloomsburg Mills south of Stitt Street;
- Possible source for the metals found in Monitoring Well MW-6 may be associated with overflow from the adjacent spill containment pit and/or the outfall channel that goes to stormwater outfall #002; and
- Possible source for the metals found in Monitoring Well MW-18 may be associated with the disposal of debris and/or waste in the woods in the area near this well.

Together these conclusions present a summary of findings resulting from the completion of the Phase II investigation completed at the site.

## **7.2 RECOMMENDATIONS**

Based on these findings and conclusions the following recommendations are presented to Cooper Tools LLC for consideration in the ongoing activities associated with this plant. These recommendations are as follows:

- The findings presented herein should be reported to the North Carolina Department of Environment and Natural Resources (NCDENR);

- Soil investigation for suspected source area in the vicinity of the former leach field near Monitoring Well MW-4;
- Soil investigation for suspected source in the vicinity of Monitoring Well MW-6 and the adjacent spill containment pit and the outfall channel that goes to stormwater outfall #002;
- Soil investigation for suspected source area in the near vicinity of Monitoring Well MW-9;
- Soil investigation for suspected source area in the near vicinity of Monitoring Well MW-18;
- Conduct slug tests in four selected monitoring wells at site in order to determine rate of groundwater migration underlying the site; and
- Assess the natural degradation of the VOCs within the subsurface below the site with laboratory analysis for a suite of EPA and NCDENR parameters required for assessment of natural biodegradation.

These recommendations are based on a review of the findings from this investigation and the conditions at the site. The primary recommendation is the first recommendation presented above. Once the first recommendation is completed the assignment of this site into a specific NCDENR program the other recommendations would be required to be implemented by the NCDENR. The subsequent five recommendations are presented herein in order to provide an insight of additional field work that would likely be required to be completed at this site by NCDENR.

However, the last recommendation is recommended in order to better understand the degree of natural degradation that has occurred at this site. These data would be useful data for the ultimate remedial action plan for this site.

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TABLES

**TABLE 1**  
**MONITORING WELL CONSTRUCTION DETAILS**  
**COOPER TOOLS LLC - MONROE PLANT**  
**3012 MASON STREET**  
**MONROE, NORTH CAROLINA**

Well Identification	Top of Casing Elevation (Feet above Datum)	Ground Elevation (Feet above Datum)	Depth to Rock (Feet below Ground Surface)	Depth Drilled (Feet below Ground Surface)	Top of Monitoring Interval (Feet below Ground Surface) <sup>1</sup>	Monitoring Interval Depth Range (Feet below Ground Surface) <sup>2</sup>	Top of Screen (Feet below Ground Surface)	Screen Interval Depth Range (Feet below Ground Surface)	Measured Total Depth (Feet below Ground Surface)
MW-1	100.00	100.2	5	20	7.5	7.5 - 20	10	10 - 20	20.0
MW-2	100.26	100.6	7	20	8	8 - 20	10	10 - 20	20.0
MW-3	116.83	117.1	22	30	18	18 - 30	20	20 - 30	29.9
MW-4	119.02	119.4	27	35	23	23 - 35	25	25 - 35	34.8
MW-5	116.94	117.4	20	35	18	18 - 35	20	20 - 35	35.1
MW-6	114.58	115.0	14	35	23	23 - 35	25	25 - 35	35.2
MW-7	115.20	115.7	6	33	21	21 - 33	23	23 - 33	33.2
MW-8	108.67	108.9	>30	30	18	18 - 30	20	20 - 30	30.0
MW-9	111.10	111.5	>30	30	18	18 - 30	20	20 - 30	30.0
MW-10	97.82	98.3	7	37	25	25 - 37	27	27 - 37	37.1
MW-11	100.13	97.8	>45	45	33	33 - 45	35	35 - 45	47.2
MW-12	113.44	113.9	26	30	18	18 - 30	20	20 - 30	30.1
MW-13	120.12	120.4	>37	37	25	25 - 37	27	27 - 37	37.5
MW-14	116.75	117.2	28	33	21	21 - 33	23	23 - 33	33.0
MW-15	115.49	115.7	>35	35	23	23 - 35	25	25 - 35	35.1
MW-16	105.38	105.6	20	40	28	28 - 40	30	30 - 40	40.1
MW-17	98.15	98.6	11	45	33	33 - 45	35	35 - 45	44.9
MW-18	98.49	98.7	5	46	34	34 - 46	36	36 - 46	46.1

<sup>1</sup> Top of Monitoring Interval represents the top of the Sand in the Annular space around the Well Screen

<sup>2</sup> Monitoring Interval represents the top and bottom of the Sand in the Annular space around the Well Screen

NOTES:

1) All measurements shown in feet

2) Datum - Set at 100.00 Feet below the Top of Casing at MW-1

**TABLE 2**  
**GROUND WATER ELEVATION DATA**  
**COOPER TOOLS LLC - MONROE PLANT**  
**3012 MASON STREET**  
**MONROE, NORTH CAROLINA**

Well Identification	TOC Elevation (Feet above Datum)	Ground Elevation (Feet above Datum)	Depth to Groundwater	Groundwater Elevation (Feet above Datum)	Depth to Groundwater	Groundwater Elevation (Feet above Datum)
			(Feet below ToC)	(Feet above Datum)	(Feet below ToC)	(Feet above Datum)
MW-1	100.00	100.2	12.97	87.03	13.94	86.06
MW-2	100.26	100.6	8.23	92.03	9.17	91.09
MW-3	116.83	117.1	12.55	104.28	14.06	102.77
MW-4	119.02	119.4	19.94	99.08	22.31	96.71
MW-5	116.94	117.4	17.70	99.24	19.95	96.99
MW-6	114.58	115.0	18.06	96.52	19.41	95.17
MW-7	115.20	115.7	15.18	100.02	17.49	97.71
MW-8	108.67	108.9	11.06	97.61	14.66	94.01
MW-9	111.10	111.5	16.82	94.28	19.22	91.88
MW-10	97.82	98.3	32.83	64.99	36.86	60.96
MW-11	100.13	97.8	22.83	77.30	27.89	72.24
MW-12	113.44	113.9	NA	NA	24.38	89.06
MW-13	120.12	120.4	NA	NA	27.53	92.59
MW-14	116.75	117.2	NA	NA	20.32	96.43
MW-15	115.49	115.7	NA	NA	18.39	97.10
MW-16	105.38	105.6	NA	NA	30.68	74.70
MW-17	98.15	98.6	NA	NA	36.16	61.99
MW-18	98.49	98.7	NA	NA	43.63	54.86

NOTES:

- 1) Depths to Groundwater measured on Date Shown
- 2) NA = Not Available
- 3) ToC = Top of casing
- 4) GS = Ground Surface
- 5) Datum = Set at 100.00 Feet below Top of Casing for MW-1

**TABLE 3**  
**SOIL ANALYTICAL DATA**  
**COOPER TOOLS LLC - MONROE PLANT**  
**3012 MASON STREET**  
**MONROE, NORTH CAROLINA**

PARAMETER		SAMPLE DATE →	12-Apr-11
		SAMPLE INTERVAL →	SOIL-1 (5')
		NCDENR IHSB RGs	
<b>VOLATILE ORGANIC COMPOUNDS</b>			
Acetone	mg/kg	12000	0.3
Benzene	mg/kg	1.1	0.0007
Carbon Disulfide	mg/kg	160	0.0027
Chloroethane	mg/kg	NE	0.005
1,1-Dichloroethane	mg/kg	3.3	0.073
1,2-Dichloroethane	mg/kg	0.43	0.0009
1,1-Dichloroethene	mg/kg	48	0.0006
cis-1,2-Dichloroethene	mg/kg	32	0.054
trans-1,2-Dichloroethene	mg/kg	30	0.0069
Ethylbenzene	mg/kg	5.4	0.0006
4-Isopropyltoluene	mg/kg	NE	0.002
2 - Butanone	mg/kg	5600	0.043
Trichloroethene	mg/kg	2.8	0.0024
Toluene	mg/kg	820	0.047
Vinyl chloride	mg/kg	0.06	0.0061
Xylenes	mg/kg	130	ND
<b>Total Volatile Organic Compounds</b>	mg/kg		0.5449

**NOTES:**

- 1) mg/kg - milligrams per kilogram.
- 2) NE - Not Established
- 3) ND - Not detected at or above laboratory method detection limits.
- 4) Depths in feet below grade level.
- 5) Blue values indicate concentrations exceed North Carolina  
Department of Environment and Natural Resources - Inactive Hazardous  
Sites Branch (NCDENR IHSB) Soil Remediation Goals (RGs).

TABLE 4  
GROUNDWATER ANALYTICAL DATA  
COOPER TOOLS LLC - MONROE PLANT  
3012 MASON STREET  
MONROE, NORTH CAROLINA

PARAMETER	UNITS	NC 2L Groundwater Standards	GROUNDWATER SAMPLE IDENTIFICATION															
			MW-1		MW-2		MW-3		MW-4		MW-5		MW-6		MW-6 DUP	MW-6	MW-7	
			04/11/11	05/24/11	04/11/11	05/24/11	04/11/11	05/24/11	04/11/11	05/24/11	04/11/11	05/24/11	04/12/11	04/12/11	05/24/11	04/12/11	05/24/11	
<b>VOLATILE ORGANIC COMPOUNDS</b>																		
1,1,1-Trichloroethane	µg/l	200	37	71	ND													
1,1,2-Trichloroethane	µg/l	0.6	5	9.3	ND													
1,3-Dichlorobenzene	µg/l	200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,4-Dichlorobenzene	µg/l	6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,1-Dichloroethane	µg/l	6	4.5	10	0.56	2	ND	ND	ND	ND	ND	1.2	0.77	0.63	0.76	0.92	ND	
1,2-Dichloroethane	µg/l	0.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.63	ND	ND	
1,1,2,3-Tetrachlorobenzene	µg/l	7	360	1000	0.87	ND	18	19	31	15	18							
1,2,4-Trichlorobenzene	µg/l	70	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
2-Butanone	µg/l	4000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
2-Chlorotoluene	µg/l	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Acetone	µg/l	6000	28	ND	10	ND	ND	ND	ND	ND								
Carbon disulfide	µg/l	700	4.6	ND	0.79	0.52	0.73	ND	ND	ND	0.65	ND	0.55	0.49	ND	2.2	ND	
Chlorobenzene	µg/l	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Chloroethane	µg/l	3000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Chloroform	µg/l	70	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Cis-1,2-Dichloroethene	µg/l	70	12	44	ND	ND	4.1	3.9	30	84	ND	ND	2.3	2.7	3.8	ND	ND	
Naphthalene	µg/l	6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Tetrachloroethene	µg/l	0.7	540	1000	ND	ND	1.6	0.64	230	600	ND	ND	22	23	26	230	180	
Trans-1,2-Dichloroethene	µg/l	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Trichloroethene	µg/l	3	6.1	10	ND	ND	1.7	0.42	36	78	0.45	ND	8.8	9	9.6	ND	1.2	
Vinyl Chloride	µg/l	0.03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Total Volatile Organic Compounds		997.2	2144.3	2.22	2.52	8.13	4.96	296	762	12.3	0.77	52.28	54.95	71.95	247.2	179.2		
<b>METALS</b>																		
Antimony	µg/l	1	ND	ND	ND	0.269	ND	ND	ND	0.638	ND	0.354	0.375	2.38	ND	ND	ND	
Arsenic	µg/l	10	ND	ND	ND	8.26	ND	6.82	ND	7.36	ND	821	914	683	ND	11.8		
Boron	µg/l	4	0.192	0.179	0.1	0.295	0.3	0.136	ND	0.118	ND	31	33.4	25.4	ND	0.391		
Cadmium	µg/l	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.386	ND	ND	2.29	0.402	ND	
Chromium	µg/l	10	3.71	ND	2.41	8.64	6.04	1.88	1.61	1.6	2.17	1.64	234	269	186	ND	14.8	
Chromium (Hexavalent)	µg/l	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Copper	µg/l	1000	4.42	ND	2.07	10.6	9.04	ND	ND	1.67	5.94	ND	919	1000	952	ND	12	
Lead	µg/l	15	ND	3.46	ND	9.08	6.48	ND	ND	3.5	4.47	3.37	1860	1990	1850	ND	9.35	
Mercury	µg/l	1	ND	0.126	ND	0.129	ND	0.087	ND	0.127	ND	0.0862	ND	0.748	0.848	ND	0.0849	
Nickel	µg/l	100	3.67	1.56	7.01	13.2	6.77	2.6	1.84	1.8	1.7	2.9	87.6	103	77.4	ND	9.59	
Selenium	µg/l	20	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Silver	µg/l	20	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Thallium	µg/l	0.2	0.13	ND	0.189	ND	0.177	ND	0.282	ND	0.287	ND	0.275	0.259	1.3	0.429	ND	
Zinc	µg/l	1000	10.7	5.94	5.75	23.4	20.8	5.12	ND	4.92	4.82	5.88	227	240	176	ND	22.9	
<b>OTHER PARAMETERS</b>																		
Ethylen Glycol	mg/l	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Propylene Glycol	mg/l	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Diesel Range Organics (C <sub>10</sub> - C <sub>28</sub> )	mg/l	0.7	0.025	ND	ND	0.12	0.11	ND	0.054	ND	0.081	0.039	0.033	0.034	0.13	0.034	0.028	
Gasoline Range Organics (C <sub>6</sub> - C <sub>10</sub> )	mg/l	0.4	0.235	0.42	ND	ND	ND	ND	0.137	0.266	ND	0.016	0.016	0.018	0.097	0.063		
Oil and Grease	mg/l	NE	ND	ND	3.02	ND	ND	ND	3.07	ND								
<b>FINAL FIELD MEASUREMENTS</b>																		
pH	S.U.	6.5-8.5	6.54	4.67	6.26	5.14	7.24	7.79	7.19	7.05	7.80	8.93	7.47	7.47	7.97	7.18	7.53	
Temperature	°C	NE	22.5	20.1	19.9	18.6	22.70	27.50	22.30	24.80	20.90	26.30	20.20	25.50	20.40	26.30		
Conductivity	µS/cm	NE	101.0	138.0	140.0	150.0	182.0	228.0	254.0	222.0	854.0	729.0	172.0	235.0	344.0	397.0		
Dissolved Oxygen	mg/l	NE	3.12	1.56	9.53	6.00	8.56	7.68	2.83	2.69	8.83	1.33	0.28	0.28	0.62	7.71	8.05	
Oxidation Reduction Potential	mV	NE	-57.00	344.00	-25.00	335.00	42.00	-13.00	-36.00	-4.00	-45.00	-10.00	-39.00	-34.00	-18.00	-11.00		

**Notes:**

1) Standards were taken from the North Carolina Administrative Code Title 15A, Chapter 2L, Section 0202 Groundwater Quality Standards (NC 2L Standards)

Values for 1,1,2-Trichloroethane and Antimony are the Groundwater Interim Maximum Allowable Concentrations established as of August 1, 2010.

2) µg/l - micrograms per liter

3) mg/l - milligrams per liter

4) J - The analyte was positively identified but the value is estimated below the laboratory reporting limit.

5) NA - Not Analyzed

6) ND - Not detected at or above laboratory method detection limits.

7) NE - Not established

8) Bold values indicate concentrations above the Method Detection Limit (MDL) and Shaded values indicate concentrations exceed NC 2L Standards.

TABLE 4  
GROUNDWATER ANALYTICAL DATA  
COOPER TOOLS LLC - MONROE PLANT  
3012 MASON STREET  
MONROE, NORTH CAROLINA

PARAMETER	UNITS	NC 2L Groundwater Standards	MW-8			MW-8 DUP		MW-9			MW-9 DUP		MW-10		MW-11			MW-12		MW-13		MW-14		MW-15		MW-16		MW-17		MW-18	
			04/12/11	05/24/11	05/24/11	04/12/11	05/25/11	05/25/11	04/12/11	05/25/11	04/12/11	05/24/11	05/24/11	05/25/11	05/24/11	05/25/11	05/24/11	05/25/11	05/24/11	05/25/11	05/24/11	05/25/11	05/25/11	05/25/11	05/25/11	05/25/11	05/25/11	05/25/11			
<b>VOLATILE ORGANIC COMPOUNDS</b>																															
1,1,1-Trichloroethane	µg/l	200	ND	ND	ND	2800	2800	2700	190	1.5	1.5	ND	0.58	6.4	ND	11	64	ND	3	3	ND										
1,1,2-Trichloroethane	µg/l	0.6	ND	ND	ND	36	58	ND	10	ND																					
1,3-Dichlorobenzene	µg/l	200	ND	ND	ND	1.2	ND																								
1,4-Dichlorobenzene	µg/l	6	ND	ND	ND	28	ND	ND	0.38	ND																					
1,1-Dichloroethane	µg/l	6	ND	ND	ND	1800	2900	2900	650	12	15	ND																			
1,2-Dichloroethane	µg/l	0.4	ND	ND	ND	13	ND	ND	2.8	ND																					
1,1,2-Trichloroethene	µg/l	7	48	88	ND	1500	2100	2100	400	8.7	8.4	ND	150	270	200	200	110	260	ND												
1,2,3-Trichlorobenzene	µg/l	NE	ND	ND	ND	1.2	ND																								
1,2,4-Trichlorobenzene	µg/l	70	ND	ND	ND	48	ND	ND	1.5	ND																					
2-Butanone	µg/l	4000	ND	ND	ND	120	ND																								
Acetone	µg/l	100	ND	ND	ND	0.34	ND																								
Carbon Disulfide	µg/l	6000	ND	ND	ND	1400	ND																								
Chlorobenzene	µg/l	50	ND	ND	ND	3.9	15	13	ND																						
Chloroethane	µg/l	3000	ND	ND	ND	310	460	420	5.4	ND																					
Chloroform	µg/l	70	ND	ND	ND	0.5	ND	ND	ND	2.1	3.1	ND	2.3	2.4	ND																
Cis-1,2-Dichloroethene	µg/l	70	41	78	68	24	51	ND	16	0.63	0.6	ND	22	11	930	53	15	64	ND												
Naphthalene	µg/l	6	ND	ND	ND	0.54	ND																								
Tetrachloroethene	µg/l	0.7	6200	2700	3300	7.5	ND	10	1.7	ND	ND	ND	67	190	8.7	0.73	2.2	ND													
Trans-1,2-Dichloroethene	µg/l	100	ND	ND	ND	0.86	ND																								
Trichloroethene	µg/l	3	81	86	84	17	ND	23	4.8	ND	ND	ND	4.4	4.8	ND																
Vinyl Chloride	µg/l	0.03	ND	ND	ND	32	ND																								
Total Volatile Organic Compounds			6370	2952	3452	6744.04	9784	8196	1282.58	25.32	29.6	0	253.68	650.9	1700.4	289.93	795.4	1784													
<b>METALS</b>																															
Antimony	µg/l	1	ND	1.73																											
Arsenic	µg/l	10	ND	13	10.7	ND	129																								
Beryllium	µg/l	4	ND	0.498	0.398	ND	5.55																								
Cadmium	µg/l	2	ND	1.05	0.518	ND	376																								
Chromium (Hexavalent)	µg/l	10	ND	18	13.4	1.66	ND	ND	1.93	18.3	1.33	ND	2.1	1.52	ND	176															
Copper	µg/l	1000	ND	21.3	15.7	ND	ND	ND	1.51	1.79	ND	ND	8.45	ND	326																
Lead	µg/l	15	ND	18.7	14.4	ND	7.22	ND	411																						
Mercury	µg/l	1	ND	0.327	0.346	ND	0.124	0.13	ND	ND	0.0857	0.133	0.0837	0.0841	0.0848	0.0848	0.0848	0.0848	0.0848	0.0848	0.0848	0.0848	0.0848	0.0848	0.0848	0.0848	0.255				
Nickel	µg/l	100	ND	20.9	16.3	3.17	2.57	2.39	1.9	1.96	2.32	ND	11.4	2.5	2.62	5.74	5.69	ND	NA												
Selenium	µg/l	20	ND																												
Silver	µg/l	20	ND																												
Thallium	µg/l	0.2	0.185	ND	ND	0.295	ND	ND	0.206	0.211	ND	0.013																			
Zinc	µg/l	1000	ND	50.9	40	4.92	ND	4.01	3.98	62.2	7.5	11	4.78	ND	11.1	14.1	ND	804													
<b>OTHER PARAMETERS</b>																															
Ethylene Glycol	mg/l	10	ND	ND	ND	NA	ND	NA	NA	ND																					
Propylene Glycol	mg/l	NE	ND	ND	ND	NA	ND	NA	NA	ND																					
Diesel Range Organics (C <sub>10</sub> - C <sub>20</sub> )	mg/l	0.7	0.039	ND	0.035	NA	0.23	0.24	NA	NA	0.1	ND	0.092	0.062	0.26	0.19	0.04	NA													
Gasoline Range Organics (C <sub>6</sub> - C <sub>10</sub> )	mg/l	0.4	2.01	1.04	0.982	NA	0.224	0.194	NA	NA	0.011	0.023	0.035	0.082	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.028				
Oil and Grease	mg/l	NE	ND	4.41	ND	NA	ND	NA	NA	ND	NA																				
<b>FINAL FIELD MEASUREMENTS</b>																															
pH	S.U.	6.5-8.5	7.20	6.06	6.06	6.15	7.55	7.55	6.43	6.23	8.68	4.99	5.11	5.77	5.88	5.96	5.54	5.74	5.88	5.96	5.54	5.74	5.88	5.96	5.54	5.74	5.88				
Temperature	°C	NE	21.70	21.38	21.38	18.80	26.40	26.40	20.10	18.90	26.00	21.39	22.25	19.60	21.90	21.40	18.40	25.90	19.60	21.90	21.40	18.40	25.90	19.60	21.90	21.40	18.40				
Conductivity	µS/cm	NE	22.00	258.0	258.0	146.0	172.0	172.0	80.0	102.0	113.0	155.0	97.0	171.0	192.0	177.0	119.0	535.0	171.0												

TABLE 4  
GROUNDWATER ANALYTICAL DATA  
COOPER TOOLS LLC - MONROE PLANT  
3012 MASON STREET  
MONROE, NORTH CAROLINA

PARAMETER	UNITS	NC 2L Groundwater Standards	Trip Blank																	
			04/11/11	04/12/11	04/12/11	04/12/11	04/12/11	05/24/11	05/24/11	05/24/11	05/24/11	05/24/11	05/24/11	05/24/11	05/25/11	05/25/11	05/25/11	05/25/11	05/25/11	
<b>VOLATILE ORGANIC COMPOUNDS</b>																				
1,1,1-Trichloroethane	µg/l	200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	µg/l	0.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	µg/l	200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	µg/l	6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	µg/l	6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	µg/l	0.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	µg/l	7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	µg/l	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	µg/l	70	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	µg/l	4000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	µg/l	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	µg/l	6000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	µg/l	700	0.27	<b>0.54</b>	<b>0.55</b>	<b>0.41</b>	<b>0.48</b>	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	µg/l	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	µg/l	3000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	µg/l	70	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cis-1,2-Dichloroethene	µg/l	70	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	µg/l	6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	µg/l	0.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trans-1,2-Dichloroethene	µg/l	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	µg/l	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	µg/l	0.03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Volatile Organic Compounds			0.27	0.54	0.55	0.41	0.48	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>METALS</b>																				
Antimony	µg/l	1	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA
Arsenic	µg/l	10	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA
Beryllium	µg/l	4	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA
Cadmium	µg/l	2	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA
Chromium	µg/l	10	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA
Chromium (Hexavalent)	µg/l	NE	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA
Copper	µg/l	1000	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA
Lead	µg/l	15	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA
Mercury	µg/l	1	NA	NA	NA	NA	ND	ND	<b>0.0851</b>	NA	NA	NA	NA	NA	<b>0.0876</b>	NA	NA	NA	NA	NA
Nickel	µg/l	100	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA
Selenium	µg/l	20	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA
Silver	µg/l	20	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA
Thallium	µg/l	0.2	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA
Zinc	µg/l	1000	NA	NA	NA	NA	<b>41.2</b>	<b>15.2</b>	ND	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA
<b>OTHER PARAMETERS</b>																				
Ethyleneglycol	mg/l	10	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Propylene Glycol	mg/l	NE	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diesel Range Organics (C <sub>10</sub> - C <sub>28</sub> )	mg/l	0.7	NA	NA	NA	NA	<b>0.054</b>	<b>0.054</b>	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Gasoline Range Organics (C <sub>6</sub> - C <sub>10</sub> )	mg/l	0.4	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oil and Grease	mg/l	NE	NA	NA	NA	NA	ND	<b>4.82</b>	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>FINAL FIELD MEASUREMENTS</b>																				
pH	S.U.	6.5-8.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Temperature	°C	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Conductivity	µS/cm	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Oxygen	mg/l	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oxidation/Reduction Potential	mV	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

**Notes:**

1) Standards were taken from the North Carolina Administrative Code Title 15A, Chapter 2L, Section .0202 Groundwater Quality Standards (NC 2L Standards).

Values for 1,1,2-Trichloroethane and Antimony are the Groundwater Interim Maximum Allowable Concentrations established as of August 1, 2010.

2) µg/l - micrograms per liter

3) mg/l - milligrams per liter

4) J - The analyte was positively identified but the value is estimated below the laboratory reporting limit.

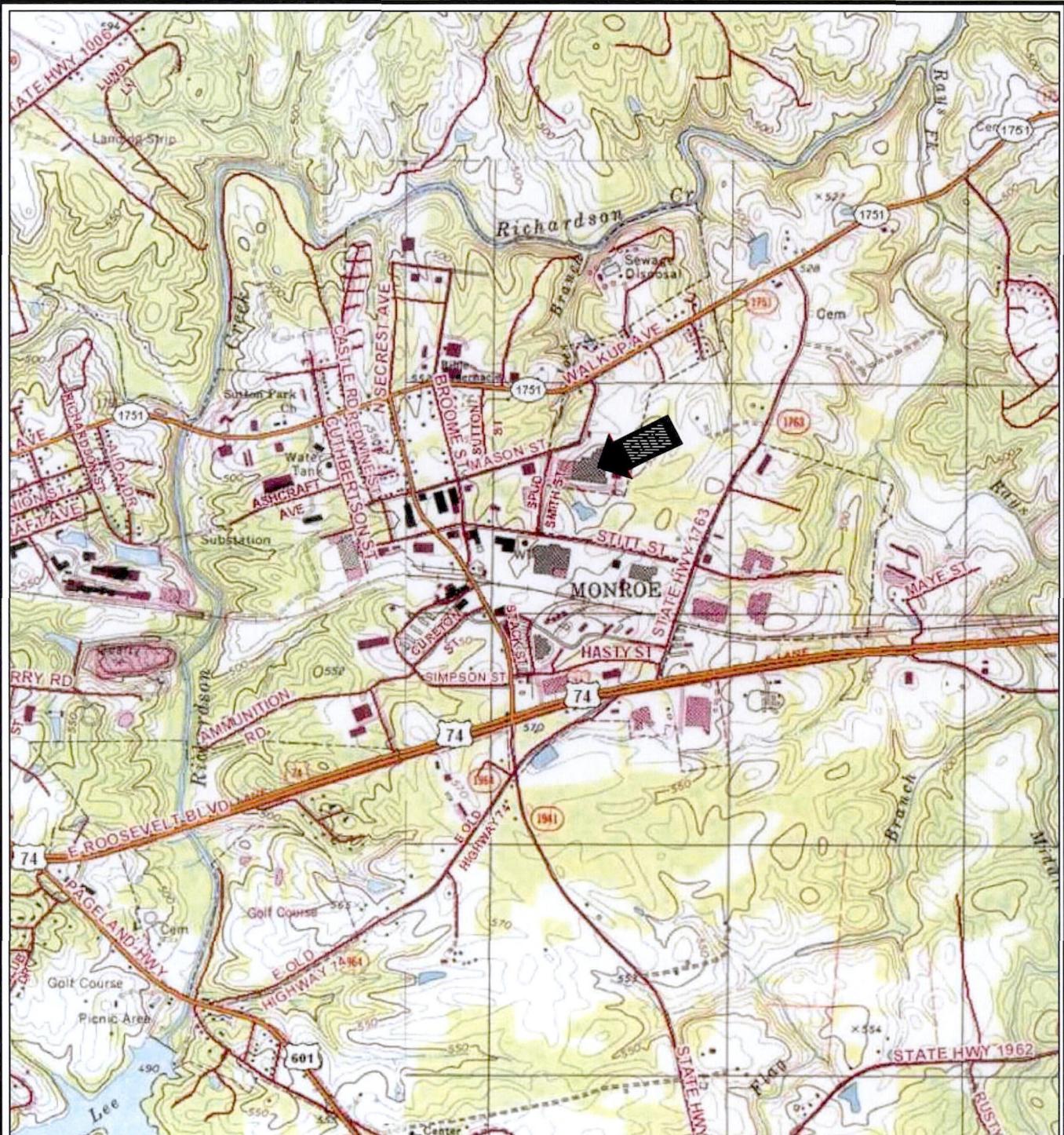
5) NA - Not Analyzed

6) ND - Not detected at or above laboratory method detection limits.

7) NE - Not established

8) Bold values indicate concentrations above the Method Detection Limit (MDL) and Shaded values indicate concentrations exceed NC 2L Standards.

## FIGURES



GRAPHIC SCALE  
0 1,000 2,000  
SCALE: 1 in. = 2,000 ft.



**SHIELD**  
ENGINEERING, INC.

4301 TAGGART CREEK ROAD  
CHARLOTTE, NC 28208  
704-394-6913  
704-394-6968 fax  
[www.shieldengineering.com](http://www.shieldengineering.com)

### SITE LOCATION MAP

COOPER TOOLS LLC - MONROE PLANT  
3012 MASON STREET  
MONROE, NORTH CAROLINA  
SHIELD #1110051-01

DATE : 04/19/11	DRAWN BY : RBS
SCALE : AS SHOWN	FIGURE : 1



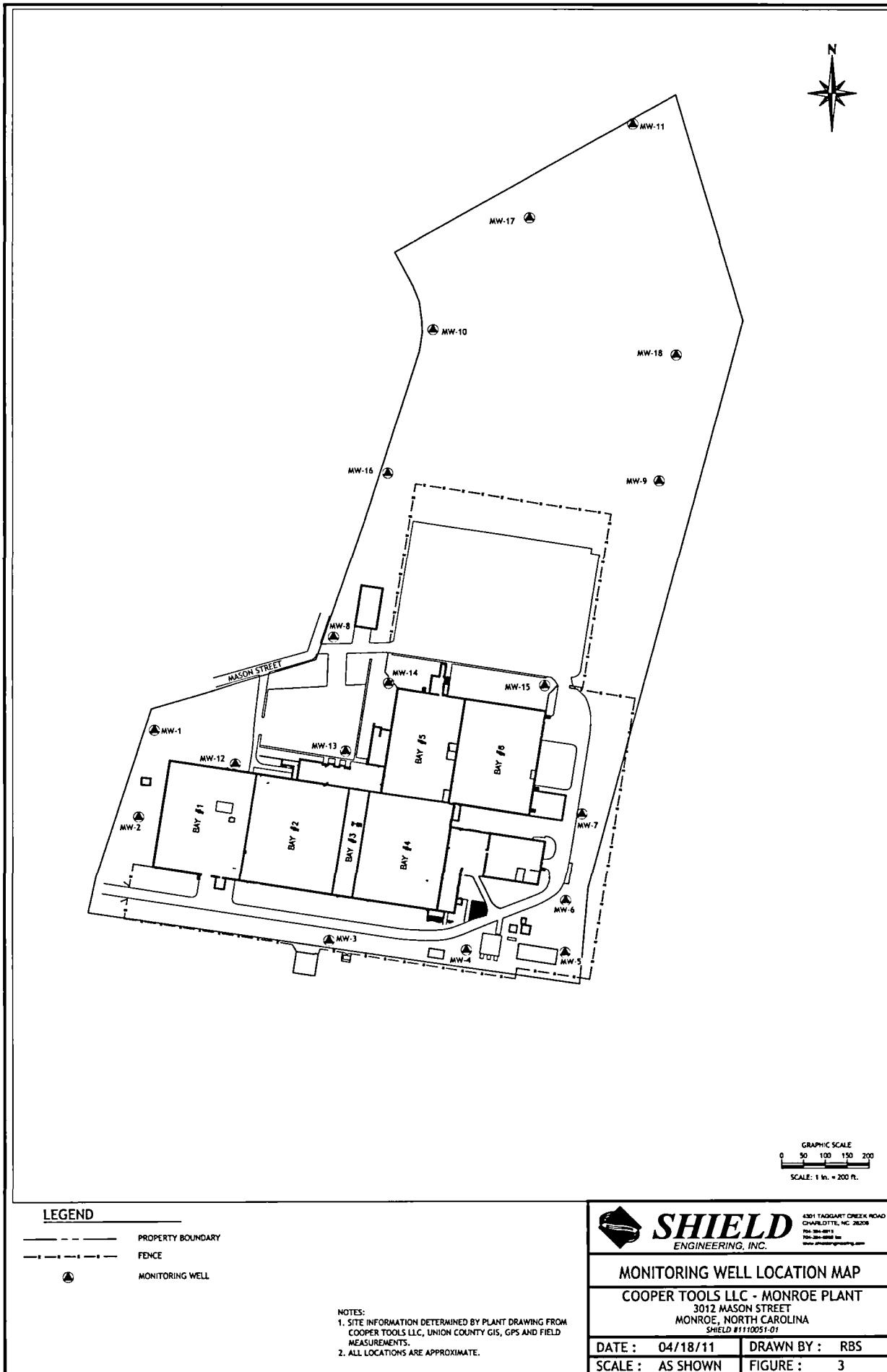
**SHIELD**  
ENGINEERING, INC.

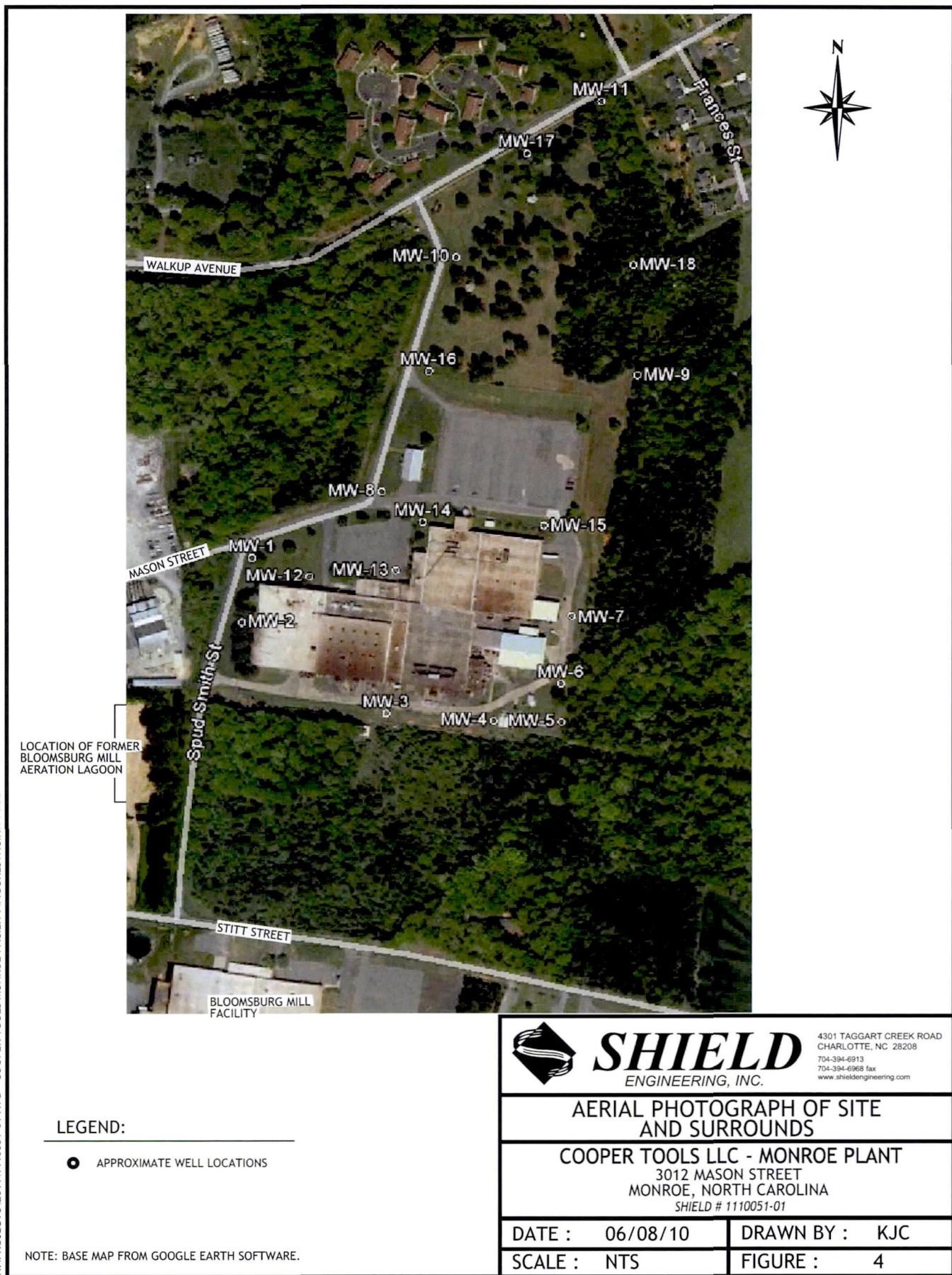
4301 TAGGART CREEK ROAD  
CHARLOTTE, NC 28208  
704-394-6913  
704-394-6968 fax  
[www.shieldengineering.com](http://www.shieldengineering.com)

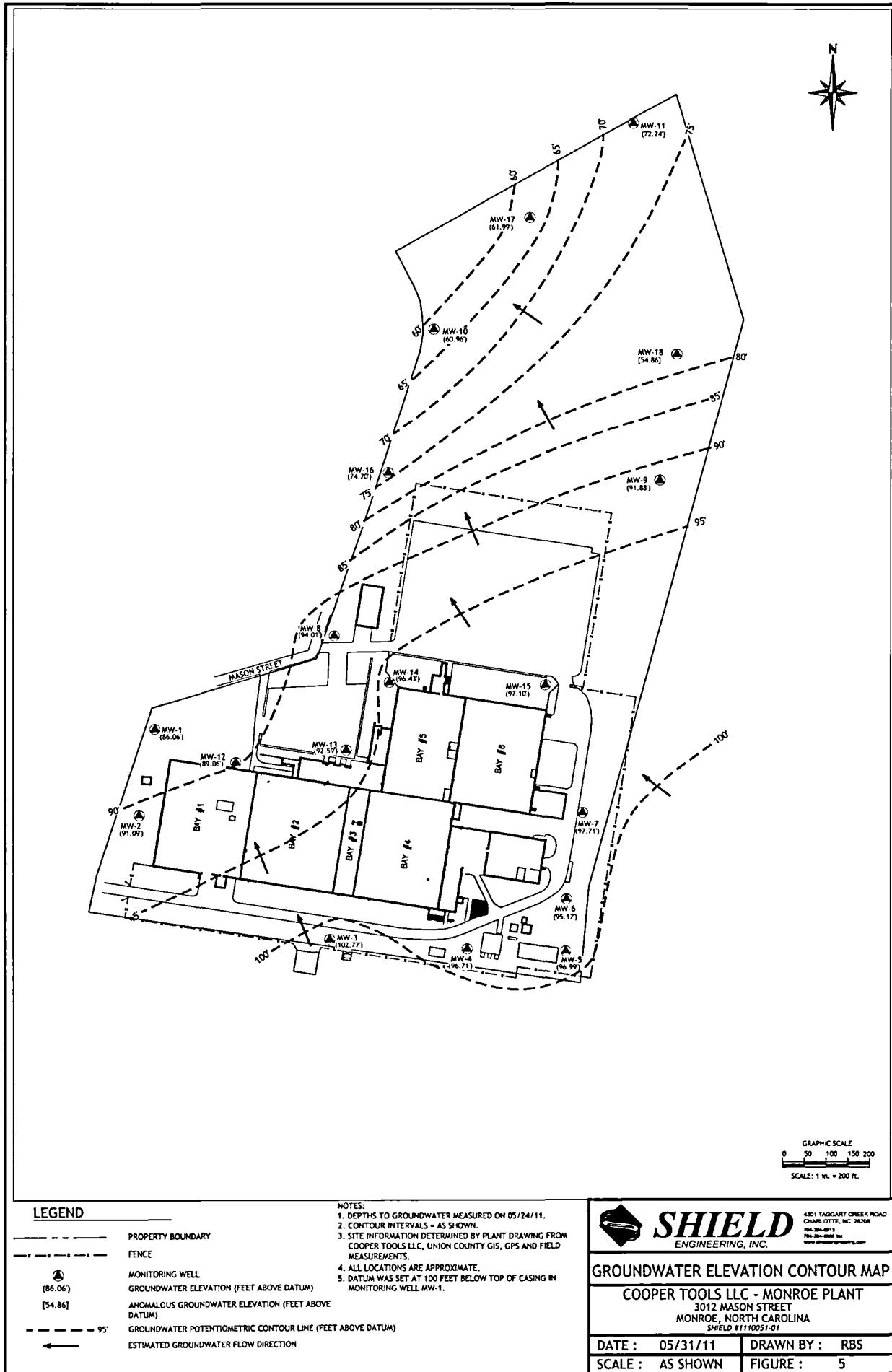
**USGS 1976 AERIAL PHOTOGRAPH**

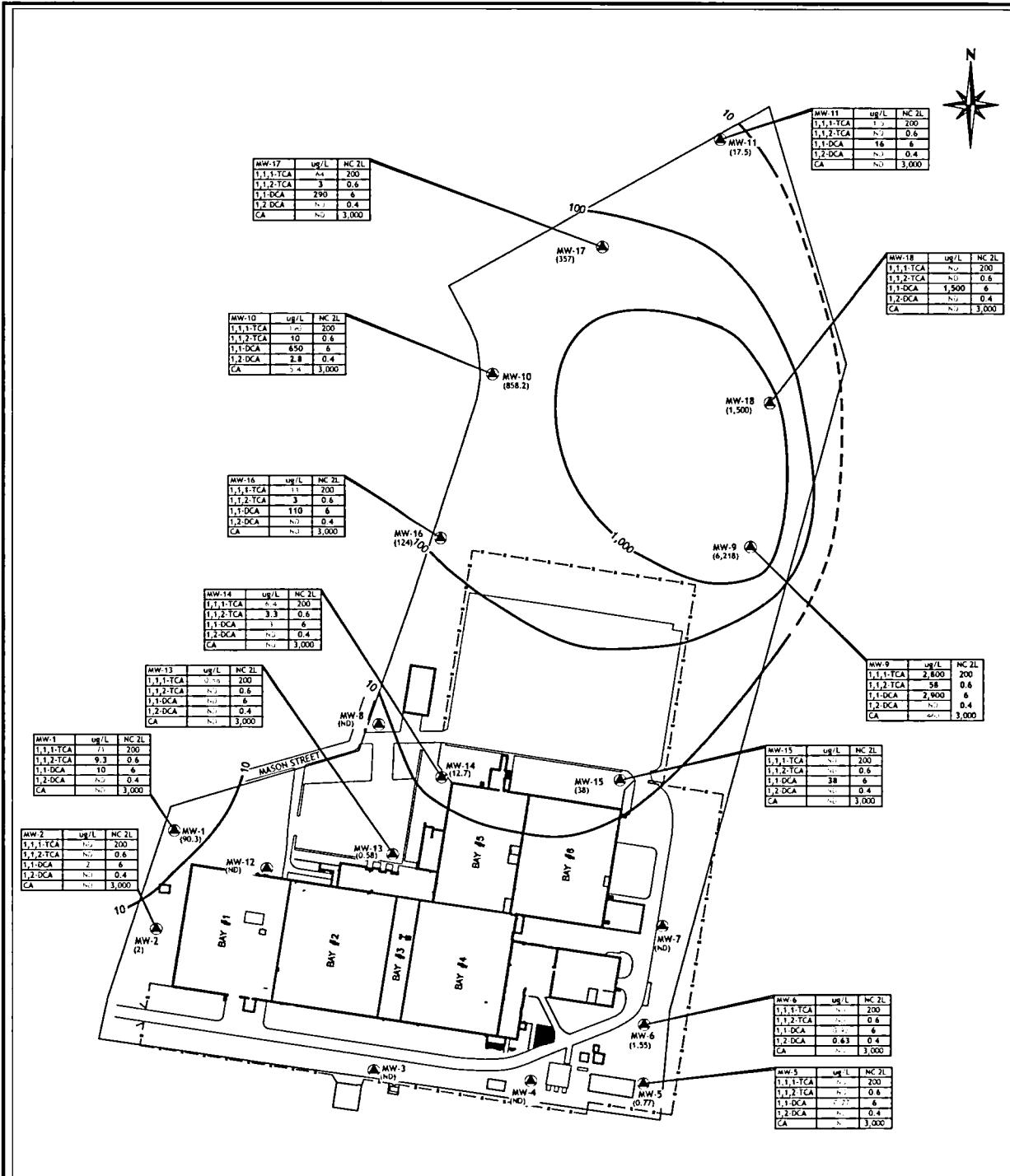
**COOPER TOOLS LLC - MONROE PLANT**  
3012 MASON STREET  
MONROE, NORTH CAROLINA  
SHIELD #1110051-01

DATE : 04/21/11	DRAWN BY : RBS
SCALE : N.T.S.	FIGURE : 2







**LEGEND**

- PROPERTY BOUNDARY
- FENCE
- MONITORING WELL
- (ug/L)
- TOTAL HALOGENATED ALKANES (ug/L)
- TOTAL HALOGENATED ALKANES ISOCONCENTRATION LINE (ug/L)
- INFERRRED TOTAL HALOGENATED ALKANES ISOCONCENTRATION LINE (ug/L)
- (ND)
- NOT DETECTED AT OR ABOVE LABORATORY DETECTION LIMITS FOR THE REPORT.
- NC 2L
- NORTH CAROLINA 2L GROUNDWATER STANDARDS
- HALOGENATED ALKANES (ug/L)
- 1,1,1-TCA      1,1,1-TRICHLOROETHANE
- 1,1,2-TCA      1,1,2-TRICHLOROETHANE
- 1,1-DCA      1,1-DICHLOROETHANE
- 1,2-DCA      1,2-DICHLOROETHANE
- CA      CHLOROETHANE
- BOLD IN WELL TABLE INDICATES CONSTITUENT EXCEEDS NORTH CAROLINA GROUNDWATER STANDARDS (NC 2L)

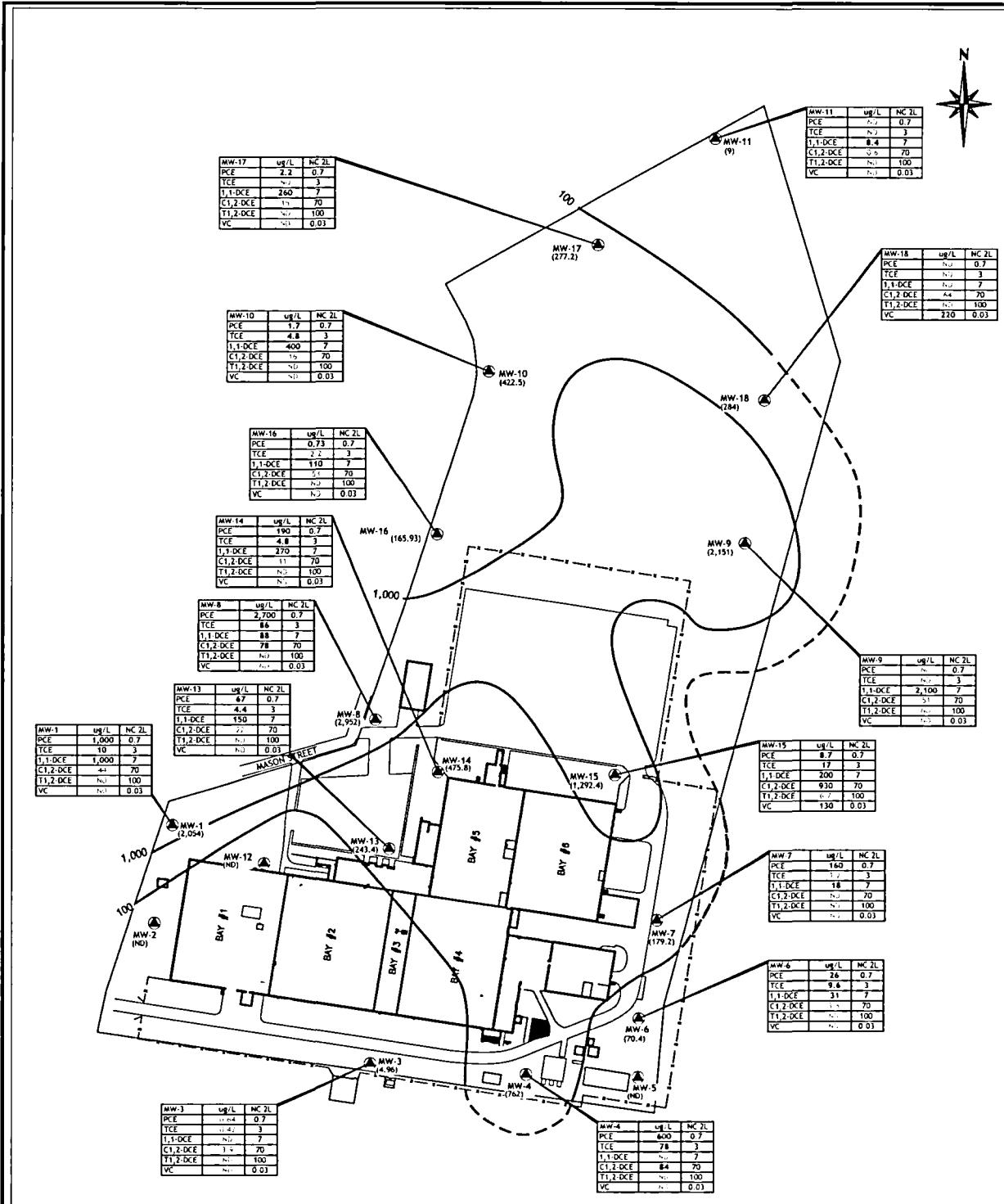
- NOTES:
1. GROUNDWATER SAMPLES COLLECTED ON 05/24/11 AND 05/25/11. ONLY MW-10 WAS COLLECTED ON 04/12/11.
  2. CONTOUR INTERVALS = AS SHOWN.
  3. SITE INFORMATION DETERMINED BY PLANT DRAWING FROM COOPER TOOLS LLC, UNION COUNTY GIS, GPS AND FIELD MEASUREMENTS.
  4. ALL LOCATIONS ARE APPROXIMATE.

GRAPHIC SCALE  
0 50 100 150 200  
SCALE: 1 in. = 200 ft.

**SHIELD**  
ENGINEERING, INC.  
101 TACOMA CREEK ROAD  
CARMEL, NC 27012  
704-360-0111  
704-360-0112  
[www.shieldengineering.com](http://www.shieldengineering.com)

**HALOGENATED ALKANES CONSTITUENT MAP**  
**COOPER TOOLS LLC - MONROE PLANT**  
3012 MASON STREET  
MONROE, NORTH CAROLINA  
SHIELD #11051-01

DATE : 06/06/11	DRAWN BY : RBS
SCALE : AS SHOWN	FIGURE : 6

**LEGEND**

-----	PROPERTY BOUNDARY
-----	FENCE
( $\mu\text{g/L}$ )	MONITORING WELL
(6,218)	MICROGRAMS PER LITER
-----	TOTAL HALOGENATED ALKENES ( $\mu\text{g/L}$ )
-----	TOTAL HALOGENATED ALKENES ISOCONCENTRATION LINE ( $\mu\text{g/L}$ )
-----	INFERRED TOTAL HALOGENATED ALKENES ISOCONCENTRATION LINE ( $\mu\text{g/L}$ )
(ND)	NOT DETECTED AT OR ABOVE LABORATORY DETECTION LIMITS FOR THE REPORT.
NC 2L	NORTH CAROLINA 2L GROUNDWATER STANDARDS
HALOGENATED ALKENES ( $\mu\text{g/L}$ )	
PCE	TETRACHLOROETHENE
TCE	TRICHLOROETHENE
1,1-DCE	1,1-DICHLOROETHENE
C1,2-DCE	cis-1,2-DICHLOROETHENE
T1,2-DCE	trans-1,2-DICHLOROETHENE
VC	VINYL CHLORIDE
2,100	BOLD IN WELL TABLE INDICATES CONSTITUENT EXCEEDS NORTH CAROLINA GROUNDWATER STANDARDS (NC 2L)

NOTES:  
1. GROUNDWATER SAMPLES COLLECTED ON 05/24/11 AND  
05/25/11. ONLY MW-10 WAS COLLECTED ON 04/12/11.  
2. CONTOUR INTERVALS = AS SHOWN.  
3. SITE INFORMATION DETERMINED BY PLANT DRAWING FROM  
COOPER TOOLS LLC, UNION COUNTY GIS, GPS AND FIELD  
MEASUREMENTS.  
4. ALL LOCATIONS ARE APPROXIMATE.

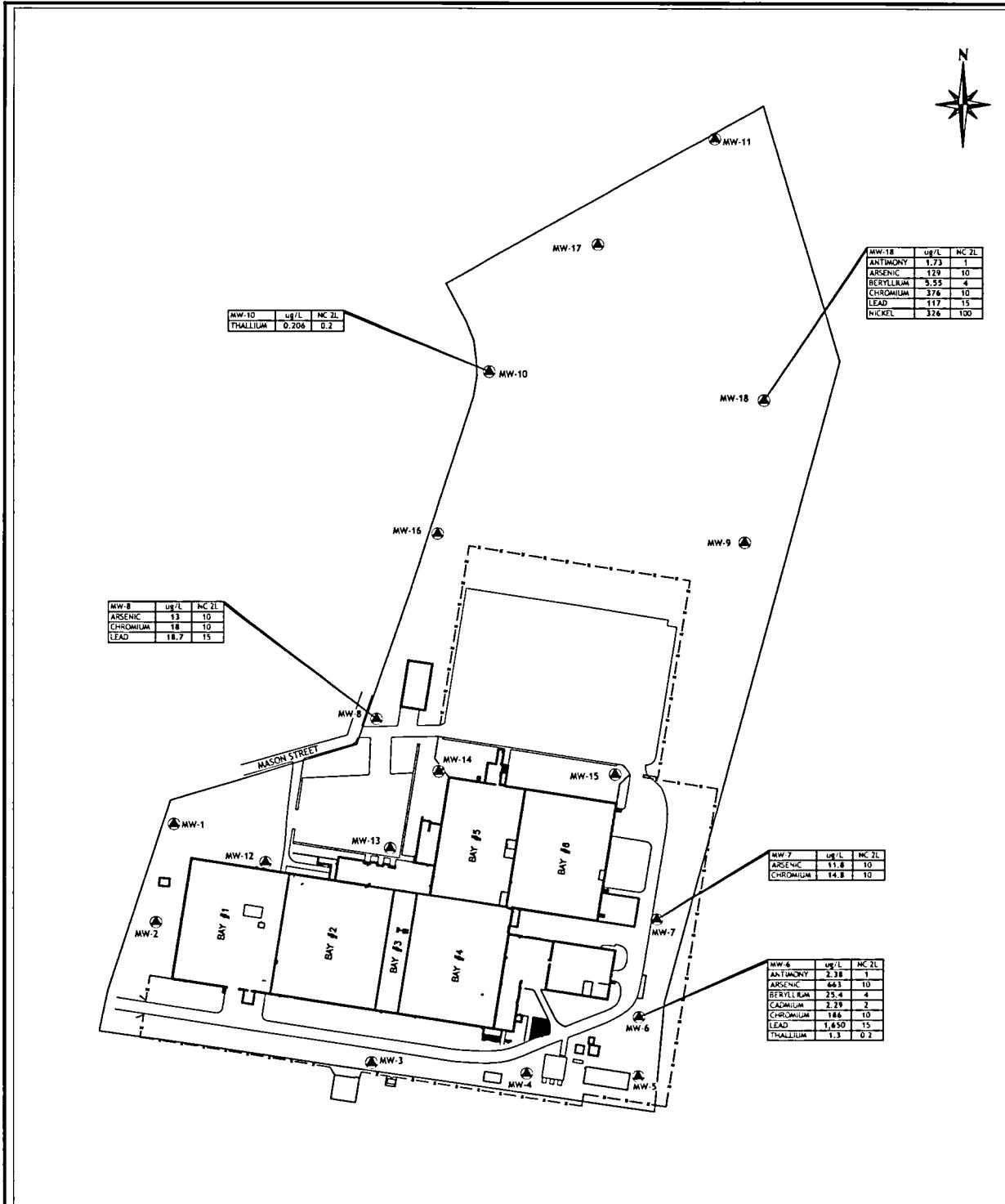
GRAPHIC SCALE  
0 50 100 150 200  
SCALE: 1 in = 200 ft

**SHIELD**  
ENGINEERING, INC.

401 FAIRFAX CREEK ROAD  
CHARLOTTE, NC 28208  
TEL: 704-588-1113  
FAX: 704-588-1114  
[www.shieldinc.com](http://www.shieldinc.com)

**HALOGENATED ALKENES CONSTITUENT MAP**  
**COOPER TOOLS LLC - MONROE PLANT**  
3012 MASON STREET  
MONROE, NORTH CAROLINA  
SHIELD #1110051-01

DATE : 06/06/11	DRAWN BY : RBS
SCALE : AS SHOWN	FIGURE : 7

**LEGEND**

- PROPERTY BOUNDARY
- - - FENCE
- MONITORING WELL
- (µg/L) MICROGRAMS PER LITER
- NC 2L NORTH CAROLINA 2L GROUNDWATER STANDARDS

GRAPHIC SCALE  
0 50 100 150 200  
SCALE: 1 in. = 200 ft.

**SHIELD**  
ENGINEERING, INC.

421 FAIRFAX CREEK ROAD  
CHARLOTTE, NC 28208  
TEL: 704-285-1111  
FAX: 704-285-1111  
[www.shieldinc.com](http://www.shieldinc.com)

**METAL CONSTITUENT MAP**

**COOPER TOOLS LLC - MONROE PLANT**  
3012 MASON STREET  
MONROE, NORTH CAROLINA  
SHIELD #110051-01

DATE : 06/07/11	DRAWN BY : RBS
SCALE : AS SHOWN	FIGURE : 8

- NOTES:**
1. GROUNDWATER SAMPLES COLLECTED ON 05/24/11 AND 05/25/11. ONLY MW-10 WAS COLLECTED ON 04/12/11.
  2. SITE INFORMATION DETERMINED BY PLANT DRAWING FROM COOPER TOOLS LLC, UNION COUNTY GIS, GPS AND FIELD MEASUREMENTS.
  3. ALL LOCATIONS ARE APPROXIMATE.
  4. ONLY THOSE METALS EXCEEDING THE NORTH CAROLINA GROUNDWATER STANDARDS (NC 2L) ARE SHOWN.



# BORING LOG



Report No.: 1110051-01

DATE: June 10, 2011

Client: Cooper Tools, LLC							
Project: Cooper Tools Plant - Monroe, North Carolina							
Boring No.: MW-01		Total Depth 20.0'	Elev:	Location:			
Type of Boring: Air Rotary		Started: 4/4/11	Completed: 4/4/11	Driller: Geologic Exploration			
Elevation	Depth	DESCRIPTION OF MATERIALS (Classification)			* Sample Blows	Sample Depth (Feet)	OVA (ppm) WELL LOG REMARKS
	0.20	Grass Orange Brown Clayey SILT, with rock fragments					
	5.00	Rock sampled as brown yellow fine to coarse Sandy SILT				5.0	1.31
						10.0	3.78
						15.0	5.3
	20.00	Boring terminated at 20 feet.				20.0	5.27

\*Number of blows required for a 140 lb hammer dropping 30" to drive 2" O.D., 1.375" I.D. sampler a total of 18 inches in three 6" increments. The sum of the last two increments of penetration is termed the standard penetration resistance, N.

**BORING LOG**

Report No.: 1110051-01

DATE: June 10, 2011

Client: Cooper Tools, LLC							
Project: Cooper Tools Plant - Monroe, North Carolina							
Boring No.: MW-02		Total Depth 20.0'	Elev:	Location:			
Type of Boring: Air Rotary		Started: 4/4/11	Completed: 4/4/11	Driller: Geologic Exploration			
Elevation	Depth	DESCRIPTION OF MATERIALS (Classification)		* Sample Blows	Sample Depth (Feet)	OVA (ppm)	WELL LOG
	0.20	Grass Orange Brown Clayey SILT, some rock fragments				5.0	4.47
	7.00	Rock sampled as light brown Silty fine to coarse SAND, with rock fragments				10.0	9.08
	20.00	Boring terminated at 20 feet.				15.0	7.64
						20.0	3.95

\*Number of blows required for a 140 lb hammer dropping 30" to drive 2" O.D., 1.375" I.D. sampler a total of 18 inches in three 6" increments. The sum of the last two increments of penetration is termed the standard penetration resistance, N.

## BORING LOG



Report No.: 1110051-01

DATE: June 10, 2011

\*Number of blows required for a 140 lb hammer dropping 30" to drive 2" O.D., 1.375" I.D. sampler a total of 18 inches in three 6" increments. The sum of the last two increments of penetration is termed the standard penetration resistance, N.

# BORING LOG



Report No.: 1110051-01

DATE: June 10, 2011

Project: Cooper Tools Plant - Monroe, North Carolina							
Boring No.: MW-04		Total Depth 35.0'	Elev:	Location:			
Type of Boring: Air Rotary			Started: 4/4/11	Completed: 4/4/11	Driller: Geologic Exploration		
Elevation	Depth	DESCRIPTION OF MATERIALS (Classification)			* Sample Blows	Sample Depth (Feet)	OVA (ppm)
	0.20	Grass Brown Orange Clayey SILT, with rock fragments					
	5.00	Light Brown Soft Rock sampled as light brown fine to coarse Sandy SILT, some rock fragments				5.0	5.29
						10.0	4.83
						15.0	4.64
						20.0	5.46
						25.0	5.43
	27.00	Gray Rock				30.0	5.08
	30.00						
	35.00	Boring terminated at 35 feet.				35.0	2.42

\*Number of blows required for a 140 lb hammer dropping 30" to drive 2" O.D., 1.375" I.D. sampler a total of 18 inches in three 6" increments. The sum of the last two increments of penetration is termed the standard penetration resistance, N.

## BORING LOG



Report No.: 1110051-01

DATE: June 10, 2011

Client: Cooper Tools, LLC

Project: Cooper Tools Plant - Monroe, North Carolina

Boring No.: MW-05/SB-5A Total Depth 35.0' Elev: Location:

Type of Boring: Air Rotary		Started: 4/6/11	Completed: 4/6/11	Driller: Geologic Exploration				
Elevation	Depth	DESCRIPTION OF MATERIALS (Classification)		* Sample Blows	Sample Depth (Feet)	OVA (ppm)	WELL LOG	REMARKS
		Brown Clayey SILT, moist (FILL)						
11.00		Soft Rock, unable to sample			5.0	2.23		Set 2" PVC well to 35 ft.
20.00		Hard Rock			20.0	28.27		Bentonite 10 to 18 ft.
35.00		Boring terminated at 35 feet.			25.0	38.70		Sand 18 to 35 ft.
					30.0	25.97		Screen 20 to 35 ft.
					35.0	3.86		

\*Number of blows required for a 140 lb hammer dropping 30" to drive 2" O.D., 1.375" I.D. sampler a total of 18 inches in three 6" increments. The sum of the last two increments of penetration is termed the standard penetration resistance, N.

**BORING LOG**

Report No.: 1110051-01

DATE: June 10, 2011

Client: Cooper Tools, LLC

Project: Cooper Tools Plant - Monroe, North Carolina

Boring No.: SB-5		Total Depth 30.0'	Elev:	Location:					
Type of Boring: Air Rotary			Started: 4/5/11	Completed: 4/5/11	Driller: Geologic Exploration				
Elevation	Depth	DESCRIPTION OF MATERIALS (Classification)			* Sample Blows	Sample Depth (Feet)	OVA (ppm)	WELL LOG	REMARKS
	0.20	Grass Orange Brown Clayey SILT, with rock fragments							
	4.00	Gray Brown Clayey SILT, some fine to coarse sand				5.0	357		
	10.00	Gray Rock Sampled as gray silty fine to coarse SAND and rock fragments				15.0	303		
	20.0					20.0	201		
	25.0					25.0	12.80		
	30.00	Boring terminated at 30 feet. Abandoned on 4/6/11.				30.0	22.69		

\*Number of blows required for a 140 lb hammer dropping 30" to drive 2" O.D., 1.375" I.D. sampler a total of 18 inches in three 6" increments. The sum of the last two increments of penetration is termed the standard penetration resistance, N.

## BORING LOG



Report No.: 1110051-01

DATE: June 10, 2011

\*Number of blows required for a 140 lb hammer dropping 30" to drive 2" O.D., 1.375" I.D. sampler a total of 18 inches in three 6" increments. The sum of the last two increments of penetration is termed the standard penetration resistance, N.

# BORING LOG



Report No.: 1110051-01

DATE: June 10, 2011

Client: Cooper Tools, LLC							
Project: Cooper Tools Plant - Monroe, North Carolina							
Boring No.: MW-07		Total Depth 33.0'	Elev:	Location:			
Type of Boring: Air Rotary		Started: 4/5/11	Completed: 4/5/11	Driller: Geologic Exploration			
Elevation	Depth	DESCRIPTION OF MATERIALS (Classification)		* Sample Blows	Sample Depth (Feet)	OVA (ppm)	WELL LOG
	0.20	Grass					
	2.50	Orange Clayey SILT, with rock fragments					
	6.00	Brown Soft Rock sampled as brown fine to coarse Sandy SILT, with rock fragments			5.0	2.69	
	9.00	Gray Rock					
	15.0	Brown Soft Rock			10.0	4.06	Set 2" PVC well to 33 ft.
	20.0				15.0	2.59	8 ft soft
	25.0				20.0	3.10	12 ft. soft
	30.0				25.0	2.87	16 ft. soft
	33.00				30.0	2.68	Bentonite 18 to 21 ft. 20 ft. soft
		Boring terminated at 33 feet.					Sand 21 to 33 ft.
							Screen 23 to 33 ft.

\*Number of blows required for a 140 lb hammer dropping 30" to drive 2" O.D., 1.375" I.D. sampler a total of 18 inches in three 6" increments. The sum of the last two increments of penetration is termed the standard penetration resistance, N.

## BORING LOG



Report No.: 1110051-01

DATE: June 10, 2011

Client: Cooper Tools, LLC

Project: Cooper Tools Plant - Monroe, North Carolina

Boring No.: MW-08		Total Depth 30.0'	Elev:	Location:					
Type of Boring: Air Rotary		Started: 4/5/11		Completed: 4/5/11		Driller: Geologic Exploration			
Elevation	Depth	DESCRIPTION OF MATERIALS (Classification)			* Sample Blows	Sample Depth (Feet)	OVA (ppm)	WELL LOG	REMARKS
	0.20	Grass Orange Brown Clayey SILT, with rock fragments					5.0	2.99	
							10.0	3.14	Set 2" PVC well to 30 ft.
							15.0	4.46	Bentonite 14 to 18 ft. soft 15 -16 ft.
							20.0	4.49	Sand 18 to 30 ft.
							25.0	3.83	Screen 20 to 30 ft.
	30.00	Boring terminated at 30 feet.					30.0	3.68	

\*Number of blows required for a 140 lb hammer dropping 30" to drive 2" O.D., 1.375" I.D. sampler a total of 18 inches in three 6" increments. The sum of the last two increments of penetration is termed the standard penetration resistance, N.

# BORING LOG



Report No.: 1110051-01

DATE: June 10, 2011

Client: Cooper Tools, LLC

Project: Cooper Tools Plant - Monroe, North Carolina

Boring No.: MW-09		Total Depth 30.0'	Elev:	Location:			
Type of Boring: Air Rotary			Started: 4/6/11	Completed: 4/6/11		Driller: Geologic Exploration	
Elevation	Depth	DESCRIPTION OF MATERIALS (Classification)			* Sample Blows	Sample Depth (Feet)	REMARKS
	0.20	Grass Yellow Red Clayey SILT, some rock fragments  Soft Rock sampled as brown fine to coarse Sandy SILT					
	6.00				5.0	38.91	Set 2" PVC well to 30 ft.
					10.0	4.76	
					15.0	8.10	Bentonite 14 to 18 ft.
					20.0	4.77	Sand 18 to 30 ft.
					25.0	8.26	Screen 20 to 30 ft.
	30.00		Boring terminated at 30 feet.		30.0	193	

\*Number of blows required for a 140 lb hammer dropping 30" to drive 2" O.D., 1.375" I.D. sampler a total of 18 inches in three 6" increments. The sum of the last two increments of penetration is termed the standard penetration resistance, N.

# BORING LOG



Report No.: 1110051-01

DATE: June 10, 2011

Client: Cooper Tools, LLC							
Project: Cooper Tools Plant - Monroe, North Carolina							
Boring No.: MW-10		Total Depth 37.0'	Elev:	Location:			
Type of Boring: Air Rotary		Started: 4/6/11	Completed: 4/6/11	Driller: Geologic Exploration			
Elevation	Depth	DESCRIPTION OF MATERIALS (Classification)	* Sample Blows	Sample Depth (Feet)	OVA (ppm)	WELL LOG	REMARKS
	0.20	Grass Red Clayey SILT, with rock fragments					
	5.00	Soft Rock			5.0 3.30		Set 2" PVC well to 37 ft.
	7.00	Hard Rock sampled as brown fine to coarse Sandy SILT			10.0 3.88		
					20.0 4.65		Bentonite 18 to 25 ft.
					25.0 4.56		Sand 25 to 37 ft.
					30.0 4.65		Screen 27 to 37 ft.
	37.00	Boring terminated at 37 feet.			35.0 1.75		

\*Number of blows required for a 140 lb hammer dropping 30" to drive 2" O.D., 1.375" I.D. sampler a total of 18 inches in three 6" increments. The sum of the last two increments of penetration is termed the standard penetration resistance, N.

## BORING LOG



Report No.: 1110051-01

DATE: June 10, 2011

Client: Cooper Tools, LLC							
Project: Cooper Tools Plant - Monroe, North Carolina							
Boring No.: MW-11		Total Depth 45.0'	Elev:	Location:			
Type of Boring: Air Rotary		Started: 4/6/11	Completed: 4/6/11	Driller: Geologic Exploration			
Elevation	Depth	DESCRIPTION OF MATERIALS (Classification)		* Sample Blows	Sample Depth (Feet)	OVA (ppm)	WELL LOG
		Orange Brown Clayey SILT					
	5.00	Red fine to coarse SAND, some clay			5.0	3.73	
	10.00	Light Brown Soft Rock			10.0	3.18	
					15.0	2.86	
					20.0	3.55	
					25.0	4.02	
					30.0	1.90	
					35.0	4.11	
					40.0	4.31	
	45.00	Boring terminated at 45 feet.			45.0	3.59	
*Number of blows required for a 140 lb hammer dropping 30" to drive 2" O.D., 1.375" I.D. sampler a total of 18 inches in three 6" increments. The sum of the last two increments of penetration is termed the standard penetration resistance, N.							

\*Number of blows required for a 140 lb hammer dropping 30" to drive 2" O.D., 1.375" I.D. sampler a total of 18 inches in three 6" increments. The sum of the last two increments of penetration is termed the standard penetration resistance, N.

## BORING LOG



Report No.: 1110051-01

DATE: June 10, 2011

Project: Cooper Tools Plant - Monroe, North Carolina							
Boring No.: MW-12		Total Depth 30.0'	Elev:	Location:			
Type of Boring: Air Rotary		Started: 5/16/11	Completed: 5/16/11	Driller: Geologic Exploration			
Elevation	Depth	DESCRIPTION OF MATERIALS (Classification)		* Sample Blows	Sample Depth (Feet)	OVA (ppm)	WELL LOG
	0.20	Grass					
	1.00	Orange Brown Clayey SILT (FILL)					
	1.25	Gravel					
		Yellowish Red Clayey SILT, some fine to medium sand (POSSIBLE RESIDUUM)					
	15.00	Light Brown soft Rock					
	20.00						
	25.00						
	30.00	Grey hard Rock					
		Boring terminated at 30 feet.					

\*Number of blows required for a 140 lb hammer dropping 30" to drive 2" O.D., 1.375" I.D. sampler a total of 18 inches in three 6" increments. The sum of the last two increments of penetration is termed the standard penetration resistance, N.

# BORING LOG



Report No.: 1110051-01

DATE: June 10, 2011

Client: Cooper Tools, LLC

Project: Cooper Tools Plant - Monroe, North Carolina

Boring No.: MW-13	Total Depth 37.0'	Elev:	Location:
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Type of Boring: Air Rotary		Started: 5/16/11	Completed: 5/16/11	Driller: Geologic Exploration				
Elevation	Depth	DESCRIPTION OF MATERIALS (Classification)		* Sample Blows	Sample Depth (Feet)	OVA (ppm)	WELL LOG	REMARKS
	0.50	Asphalt Reddish Brown Clayey SILT, some fine to coarse sand and rock fragments (FILL)			5.0	24.35		
	7.00	Orange fine to coarse Sandy SILT, some clay (RESIDUUM)			10.0	10.47		
	18.00	Brown fine to medium Sandy SILT			15.0	9.64		Set 2" PVC well to 37 ft.
	25.00	Brown soft Rock			20.0	7.44		Bentonite 21 to 25 ft.
	37.00	Boring terminated at 37 feet.			25.0	6.58		Sand 25 to 37 ft.
					35.0	9.07		Screen 27 to 37 ft.

\*Number of blows required for a 140 lb hammer dropping 30" to drive 2" O.D., 1.375" I.D. sampler a total of 18 inches in three 6" increments. The sum of the last two increments of penetration is termed the standard penetration resistance, N.

## BORING LOG



Report No.: 1110051-01

DATE: June 10, 2011

Client: Cooper Tools, LLC							
Project: Cooper Tools Plant - Monroe, North Carolina							
Boring No.: MW-14	Total Depth 33.0'	Elev:	Location:				
Type of Boring: Air Rotary	Started: 5/16/11	Completed: 5/16/11	Driller: Geologic Exploration				
Elevation	Depth	DESCRIPTION OF MATERIALS (Classification)		* Sample Blows	Sample Depth (Feet)	OVA (ppm)	WELL LOG
	0.20	Grass Orangish Brown Clayey SILT, some fine to coarse sand and rock (FILL)					
	5.00	Orange Clayey SILT, some fine to coarse sand (POSSIBLE RESIDUUM)			5.0	2.70	
	10.00	Brown fine to coarse Sandy SILT			10.0	5.82	
	12.00	Brown soft Rock			15.0	7.08	
	28.00	Grey hard Rock			20.0	8.03	Set 2" PVC well to 33 ft. Bentonite 17 to 21 ft.
	33.00	Boring terminated at 33 feet.			25.0	8.43	Sand 21 to 33 ft.
					30.0	8.21	Screen 23 to 33 ft.

\*Number of blows required for a 140 lb hammer dropping 30" to drive 2" O.D., 1.375" I.D. sampler a total of 18 inches in three 6" increments. The sum of the last two increments of penetration is termed the standard penetration resistance, N.

## BORING LOG



Report No.: 1110051-01

DATE: June 10, 2011

Project: Cooper Tools Plant - Monroe, North Carolina							
Boring No.: MW-15		Total Depth 35.0'	Elev:	Location:			
Type of Boring: Air Rotary			Started: 5/17/11	Completed: 5/17/11		Driller: Geologic Exploration	
Elevation	Depth	DESCRIPTION OF MATERIALS (Classification)		* Sample Blows	Sample Depth (Feet)	OVA (ppm)	WELL LOG
	0.20	Grass Orangish Brown Clayey SILT, some fine to coarse sand and rock fragments (FILL)					
	5.00	Reddish Brown fine to medium Sandy SILT (RESIDUUM)			5.0	32.35	
					10.0	7.29	
					15.0	5.49	
	18.00	Brown soft Rock			20.0	4.60	Set 2" PVC well to 35 ft.
					25.0	7.69	Bentonite 19 to 23 ft.
					30.0	7.57	Sand 23 to 35 ft.
							Screen 25 to 35 ft.
	34.00	soft zone @ 34 ft.					
	35.00	Boring terminated at 35 feet.					

\*Number of blows required for a 140 lb hammer dropping 30" to drive 2" O.D., 1.375" I.D. sampler a total of 18 inches in three 6" increments. The sum of the last two increments of penetration is termed the standard penetration resistance, N.

# BORING LOG



Report No.: 1110051-01

DATE: June 10, 2011

Client: Cooper Tools, LLC							
Project: Cooper Tools Plant - Monroe, North Carolina							
Boring No.: MW-16		Total Depth 40.0'	Elev:	Location:			
Type of Boring: Air Rotary		Started: 5/16/11	Completed: 5/16/11	Driller: Geologic Exploration			
Elevation	Depth	DESCRIPTION OF MATERIALS (Classification)			* Sample Blows	Sample Depth (Feet)	OVA (ppm) WELL LOG REMARKS
	0.20	Grass Yellowish Red Clayey SILT, some fine to coarse sand (RESIDUUM)				5.0	6.37
	8.50	Brown fine to coarse Sandy SILT				10.0	6.88
	20.00	Grey hard Rock				20.0	8.25
	25.0					25.0	8.43
	30.0					30.0	9.07
	35.0					35.0	8.17
	40.00	Boring terminated at 40 feet.				40.0	8.45

\*Number of blows required for a 140 lb hammer dropping 30" to drive 2" O.D., 1.375" I.D. sampler a total of 18 inches in three 6" increments. The sum of the last two increments of penetration is termed the standard penetration resistance, N.

## BORING LOG



Report No.: 1110051-01

DATE: June 10, 2011

Client: Cooper Tools, LLC

Project: Cooper Tools Plant - Monroe, North Carolina

Boring No.: B-17		Total Depth 55.0'	Elev:	Location:				
Type of Boring: Air Rotary		Started: 5/17/11	Completed: 5/23/11	Driller: Geologic Exploration				
Elevation	Depth	DESCRIPTION OF MATERIALS (Classification)		* Sample Blows	Sample Depth (Feet)	OVA (ppm)	WELL LOG	REMARKS
	0.20	Grass Reddish Brown Clayey SILT, some fine to coarse sand (RESIDUUM)						
	8.00		Brown soft Rock		5.0	3.31		
	12.00		Grey hard Rock		10.0	4.44		
	19.00		Brown soft Rock		15.0	5.93		
	25.50		Grey hard Rock		20.0	6.34		
	37.00				25.0	5.76		
	38.00		Brown soft Rock		30.0	7.37		
	50.00		Grey hard Rock		35.0	7.24		
					40.0	7.38		
					50.0	5.94		
								5/17/11 - drill to 45 ft. 5/23/11 W.L. @ 44.7 ft.

\*Number of blows required for a 140 lb hammer dropping 30" to drive 2" O.D., 1.375" I.D. sampler a total of 18 inches in three 6" increments. The sum of the last two increments of penetration is termed the standard penetration resistance, N.

**BORING LOG**

Report No.: 1110051-01

DATE: June 10, 2011

Client: Cooper Tools, LLC							
Project: Cooper Tools Plant - Monroe, North Carolina							
Boring No.: B-17		Total Depth 55.0'	Elev:	Location:			
Type of Boring:	Air Rotary	Started: 5/17/11	Completed: 5/23/11	Driller: Geologic Exploration			
Elevation	Depth	DESCRIPTION OF MATERIALS (Classification)			* Sample Blows	Sample Depth (Feet)	OVA (ppm)
	55.00	Grey hard Rock  Boring terminated at 55 feet. No water Grout Boring				55.0	6.72

\*Number of blows required for a 140 lb hammer dropping 30" to drive 2" O.D., 1.375" I.D. sampler a total of 18 inches in three 6" increments. The sum of the last two increments of penetration is termed the standard penetration resistance, N.

# BORING LOG



Report No.: 1110051-01

DATE: June 10, 2011

Client: Cooper Tools, LLC

Project: Cooper Tools Plant - Monroe, North Carolina

Boring No.: B-17A/MW-17		Total Depth 45.0'	Elev:	Location:				
Type of Boring: Air Rotary		Started: 5/23/11	Completed: 5/23/11	Driller: Geologic Exploration				
Elevation	Depth	DESCRIPTION OF MATERIALS (Classification)		* Sample Blows	Sample Depth (Feet)	OVA (ppm)	WELL LOG	REMARKS
		Orangish Brown Clayey SILT, some fine to medium sand (RESIDUUM)						
6.00		Brown soft Rock			5.0	5.83		
11.00		Grey hard Rock			10.0	7.25		
18.00		Brown soft Rock			15.0	7.24		
21.00		Grey hard Rock			20.0	7.33		Grout to surface
23.00		Brown soft Rock						
25.50		Grey hard Rock			25.0	7.74		Set 2" PVC well to 45 ft.
28.00		Brown soft Rock			30.0	7.14		-soft zone at 28 ft.
								Bentonite 30 to 33 ft.
								Sand 33 to 45 ft.
								Screen 35 to 45 ft.
45.00		Boring terminated at 45 feet.			45.0	8.17		

\*Number of blows required for a 140 lb hammer dropping 30" to drive 2" O.D., 1.375" I.D. sampler a total of 18 inches in three 6" increments. The sum of the last two increments of penetration is termed the standard penetration resistance, N.

**BORING LOG**

Report No.: 1110051-01

DATE: June 10, 2011

Client: Cooper Tools, LLC

Project: Cooper Tools Plant - Monroe, North Carolina

Boring No.: MW-18		Total Depth 46.0'	Elcv:	Location:					
Type of Boring: Air Rotary		Started: 5/23/11 Completed: 5/23/11		Driller: Geologic Exploration					
Elevation	Depth	DESCRIPTION OF MATERIALS (Classification)			* Sample Blows	Sample Depth (Feet)	OVA (ppm)	WELL LOG	REMARKS
		Yellowish Brown Clayey SILT, some fine to coarse sand							
	5.00	Light Grey Rock				5.0	10.97		
						10.0	9.20		
						15.0	8.79		
						20.0	10.78		
						25.0	15.24		Set 2" PVC well to 46 ft.
						30.0	12.37		Bentonite 30 to 34 ft.
						35.0	10.38		Sand 34 to 46 ft.
						40.0	9.25		Screen 36 to 46 ft.
						45.0	9.34		
	46.00	Boring terminated at 46 feet.							

\*Number of blows required for a 140 lb hammer dropping 30" to drive 2" O.D., 1.375" I.D. sampler a total of 18 inches in three 6" increments. The sum of the last two increments of penetration is termed the standard penetration resistance, N.

**APPENDIX B**

**Environmental Conservation Laboratories, Inc.**

4810 Executive Park Court, Suite 111

Jacksonville FL, 32216-6069

Phone: 904.296.3007 FAX: 904.296.6210



Thursday, June 2, 2011

Shield Engineering, Inc. (SH007)

Attn: Mr. Dave Wallace

4301 Taggart Creek Road

Charlotte, NC 28208

**RE: Laboratory Results for**

**Project Number: [none], Project Name/Desc: Cooper Tools**

**ENCO Workorder: B102269**

Dear Mr. Dave Wallace,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Wednesday, May 25, 2011.

Unless otherwise noted in an attached project narrative, all samples were received in acceptable condition and processed in accordance with the referenced methods/procedures. Results for these procedures apply only to the samples as submitted.

The analytical results contained in this report are in compliance with NELAC standards, except as noted in the project narrative. This report shall not be reproduced except in full, without the written approval of the Laboratory.

This report contains only those analyses performed by Environmental Conservation Laboratories. Unless otherwise noted, all analyses were performed at ENCO Jacksonville. Data from outside organizations will be reported under separate cover.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink that reads "Lindsay J. Crawford". The signature is fluid and cursive, with "Lindsay" on top and "J. Crawford" below it.

Lindsay J Crawford

Project Manager

Enclosure(s)

#### **PROJECT NARRATIVE**

Client: Shield Engineering, Inc. (SH007)

Project: Cooper Tools

ENCO Project ID: B102269

#### **Overview**

All samples submitted were analyzed by Environmental Conservation Laboratories, Inc. in accordance with the methods referenced in the laboratory report. Any particular difficulties encountered during sample handling and processing will be discussed in the Remarks section below.

#### **Remarks**

Analysis: EPA 7470A

Affected Samples: 1E31012-BLK1, 1E31012-BLK2, 1E31013-BLK1, 1E31013-BLK2, MW-1[B102269-01], MW-2[B102269-02], MW-3[B102269-03], MW-4[B102269-04], MW-5[B102269-05], MW-6[B102269-06], MW-7[B102269-07], MW-8[B102269-08], MW-8D[B102269-09], MW-12[B102269-10], MW-13[B102269-11], BAILER BLANK[B102269-12]

Nonconformance: The method blank associated to the flagged samples showed a positive result above the MDL, but below the reporting limit for Mercury. The laboratory control sample is passing all criteria.

Lindsay J Crawford  
Project Manager

**SAMPLE SUMMARY/LABORATORY CHRONICLE**

Client ID:	MW-1	Lab ID:	B102269-01	Sampled:	05/24/11 13:50	Received:	05/25/11 10:15
Parameter		Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)	
EPA 1664A		06/21/11		05/26/11	11:27	5/31/2011 09:08	
EPA 6010C		11/20/11		05/27/11	09:57	5/31/2011 11:48	
EPA 6020A		11/20/11		05/26/11	10:21	5/27/2011 23:31	
EPA 7470A		06/21/11		06/01/11	13:00	6/2/2011 13:08	
EPA 8015C		05/31/11	07/04/11	05/25/11	13:00	5/25/2011 20:17	
EPA 8015C		06/07/11		05/31/11	10:00	5/31/2011 12:45	
EPA 8015C		06/07/11		05/31/11	10:38	5/31/2011 15:35	
EPA 8260B		06/07/11		05/26/11	18:38	5/27/2011 10:04	
SM18 3500 Cr-D		05/25/11	13:50	05/25/11	12:05	5/25/2011 13:05	

Client ID:	MW-2	Lab ID:	B102269-02	Sampled:	05/24/11 14:14	Received:	05/25/11 10:15
Parameter		Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)	
EPA 1664A		06/21/11		05/26/11	11:27	5/31/2011 09:08	
EPA 6010C		11/20/11		05/27/11	09:57	5/31/2011 11:49	
EPA 6020A		11/20/11		05/26/11	10:21	5/28/2011 00:13	
EPA 7470A		06/21/11		06/01/11	13:00	6/2/2011 13:10	
EPA 8015C		05/31/11	07/04/11	05/25/11	13:00	5/25/2011 20:41	
EPA 8015C		06/07/11		05/31/11	10:00	5/31/2011 12:56	
EPA 8015C		06/07/11		05/31/11	10:38	5/31/2011 16:06	
EPA 8260B		06/07/11		05/26/11	18:38	5/28/2011 00:30	
SM18 3500 Cr-D		05/25/11	14:14	05/25/11	12:05	5/25/2011 13:05	

Client ID:	MW-3	Lab ID:	B102269-03	Sampled:	05/24/11 13:59	Received:	05/25/11 10:15
Parameter		Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)	
EPA 1664A		06/21/11		05/26/11	11:27	5/31/2011 09:08	
EPA 6010C		11/20/11		05/27/11	09:57	5/31/2011 11:51	
EPA 6020A		11/20/11		05/26/11	10:21	5/28/2011 00:21	
EPA 7470A		06/21/11		06/01/11	13:00	6/2/2011 13:11	
EPA 8015C		05/31/11	07/04/11	05/25/11	13:00	5/25/2011 21:04	
EPA 8015C		06/07/11		05/31/11	10:00	5/31/2011 13:07	
EPA 8015C		06/07/11		05/31/11	10:38	5/31/2011 16:38	
EPA 8260B		06/07/11		05/26/11	18:38	5/28/2011 01:05	
SM18 3500 Cr-D		05/25/11	13:59	05/25/11	12:05	5/25/2011 13:05	



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Client ID:	MW-4	Lab ID:	B102269-04	Sampled:	05/24/11 14:29	Received:	05/25/11 10:15
Parameter		Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)	
EPA 1664A		06/21/11		05/26/11	11:27	5/31/2011 09:08	
EPA 6010C		11/20/11		05/27/11	09:57	5/31/2011 11:53	
EPA 6020A		11/20/11		05/26/11	10:21	5/28/2011 01:12	
EPA 7470A		06/21/11		06/01/11	13:00	6/2/2011 13:13	
EPA 8015C		05/31/11	07/04/11	05/25/11	13:00	5/25/2011 21:28	
EPA 8015C		06/07/11		05/31/11	10:00	5/31/2011 13:18	
EPA 8015C		06/07/11		05/31/11	10:38	5/31/2011 17:09	
EPA 8260B		06/07/11		05/26/11	18:38	5/28/2011 02:49	
SM18 3500 Cr-D		05/25/11	14:29	05/25/11	12:05	5/25/2011 13:05	

Client ID:	MW-5	Lab ID:	B102269-05	Sampled:	05/24/11 14:55	Received:	05/25/11 10:15
Parameter		Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)	
EPA 1664A		06/21/11		05/26/11	11:27	5/31/2011 09:08	
EPA 6010C		11/20/11		05/27/11	09:42	5/31/2011 12:46	
EPA 6020A		11/20/11		05/26/11	10:21	5/28/2011 01:19	
EPA 7470A		06/21/11		06/01/11	13:00	6/2/2011 13:15	
EPA 8015C		05/31/11	07/04/11	05/25/11	13:00	5/25/2011 21:52	
EPA 8015C		06/07/11		05/31/11	10:00	5/31/2011 13:29	
EPA 8015C		06/07/11		05/31/11	10:38	5/31/2011 17:40	
EPA 8260B		06/07/11		05/26/11	18:38	5/28/2011 01:40	
SM18 3500 Cr-D		05/25/11	14:55	05/25/11	12:05	5/25/2011 13:05	

Client ID:	MW-6	Lab ID:	B102269-06	Sampled:	05/24/11 15:29	Received:	05/25/11 10:15
Parameter		Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)	
EPA 1664A		06/21/11		05/26/11	11:27	5/31/2011 09:08	
EPA 6010C		11/20/11		05/27/11	09:42	5/31/2011 12:48	
EPA 6020A		11/20/11		05/26/11	10:21	5/28/2011 01:26	
EPA 7470A		06/21/11		06/01/11	13:00	6/2/2011 13:20	
EPA 8015C		05/31/11	07/04/11	05/25/11	13:00	5/25/2011 22:39	
EPA 8015C		06/07/11		05/31/11	10:00	5/31/2011 13:40	
EPA 8015C		06/07/11		05/31/11	10:38	5/31/2011 18:11	
EPA 8260B		06/07/11		05/26/11	18:38	5/28/2011 02:15	
SM18 3500 Cr-D		05/25/11	15:29	05/25/11	12:05	5/25/2011 13:05	

Client ID:	MW-7	Lab ID:	B102269-07	Sampled:	05/24/11 15:59	Received:	05/25/11 10:15
Parameter		Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)	
EPA 1664A		06/21/11		05/26/11	11:27	5/31/2011 09:08	
EPA 6010C		11/20/11		05/27/11	09:42	5/31/2011 12:50	
EPA 6020A		11/20/11		05/26/11	10:21	5/28/2011 01:36	
EPA 7470A		06/21/11		06/01/11	13:00	6/2/2011 13:22	
EPA 8015C		05/31/11	07/04/11	05/25/11	13:00	5/25/2011 23:02	
EPA 8015C		06/07/11		05/31/11	10:00	5/31/2011 13:51	
EPA 8015C		06/07/11		05/31/11	10:38	5/31/2011 18:43	
EPA 8260B		06/07/11		05/26/11	18:38	5/28/2011 03:24	
SM18 3500 Cr-D		05/25/11	15:59	05/25/11	12:05	5/25/2011 13:05	

<b>Client ID:</b>	<b>MW-8</b>	<b>Lab ID:</b>	<b>B102269-08</b>	<b>Sampled:</b>	<b>05/24/11 14:40</b>	<b>Received:</b>	<b>05/25/11 10:15</b>
<b>Parameter</b>		<b>Hold Date/Time(s)</b>		<b>Prep Date/Time(s)</b>		<b>Analysis Date/Time(s)</b>	
EPA 1664A		06/21/11		05/26/11	11:27	5/31/2011 09:08	
EPA 6010C		11/20/11		05/27/11	09:42	5/31/2011 12:52	
EPA 6020A		11/20/11		05/26/11	10:21	5/28/2011 01:43	
EPA 7470A		06/21/11		06/01/11	13:00	6/2/2011 13:24	
EPA 8015C		05/31/11	07/04/11	05/25/11	13:00	5/25/2011 23:26	
EPA 8015C		06/07/11		05/31/11	10:00	5/31/2011 14:02	
EPA 8015C		06/07/11		05/31/11	10:38	5/31/2011 19:14	
SM18 3500 Cr-D		05/25/11	14:40	05/25/11	12:05	5/25/2011 13:05	

<b>Client ID:</b>	<b>MW-8</b>	<b>Lab ID:</b>	<b>B102269-08RE1</b>	<b>Sampled:</b>	<b>05/24/11 14:40</b>	<b>Received:</b>	<b>05/25/11 10:15</b>
<b>Parameter</b>		<b>Hold Date/Time(s)</b>		<b>Prep Date/Time(s)</b>		<b>Analysis Date/Time(s)</b>	
EPA 8260B		06/07/11		05/26/11	18:38	5/31/2011 18:19	

<b>Client ID:</b>	<b>MW-8D</b>	<b>Lab ID:</b>	<b>B102269-09</b>	<b>Sampled:</b>	<b>05/24/11 15:00</b>	<b>Received:</b>	<b>05/25/11 10:15</b>
<b>Parameter</b>		<b>Hold Date/Time(s)</b>		<b>Prep Date/Time(s)</b>		<b>Analysis Date/Time(s)</b>	
EPA 1664A		06/21/11		05/26/11	11:27	5/31/2011 09:08	
EPA 6010C		11/20/11		05/27/11	09:42	5/31/2011 12:54	
EPA 6020A		11/20/11		05/26/11	10:21	5/28/2011 01:50	
EPA 7470A		06/21/11		06/01/11	13:00	6/2/2011 13:25	
EPA 8015C		05/31/11	07/04/11	05/25/11	13:00	5/25/2011 23:49	
EPA 8015C		06/07/11		05/31/11	10:00	5/31/2011 14:13	
EPA 8015C		06/07/11		05/31/11	10:38	5/31/2011 20:16	
SM18 3500 Cr-D		05/25/11	15:00	05/25/11	12:05	5/25/2011 13:05	

<b>Client ID:</b>	<b>MW-8D</b>	<b>Lab ID:</b>	<b>B102269-09RE1</b>	<b>Sampled:</b>	<b>05/24/11 15:00</b>	<b>Received:</b>	<b>05/25/11 10:15</b>
<b>Parameter</b>		<b>Hold Date/Time(s)</b>		<b>Prep Date/Time(s)</b>		<b>Analysis Date/Time(s)</b>	
EPA 8260B		06/07/11		05/26/11	18:38	5/31/2011 18:54	

<b>Client ID:</b>	<b>MW-12</b>	<b>Lab ID:</b>	<b>B102269-10</b>	<b>Sampled:</b>	<b>05/24/11 15:32</b>	<b>Received:</b>	<b>05/25/11 10:15</b>
<b>Parameter</b>		<b>Hold Date/Time(s)</b>		<b>Prep Date/Time(s)</b>		<b>Analysis Date/Time(s)</b>	
EPA 1664A		06/21/11		05/26/11	11:27	5/31/2011 09:08	
EPA 6010C		11/20/11		05/27/11	09:42	5/31/2011 13:00	
EPA 6020A		11/20/11		05/26/11	10:21	5/28/2011 02:00	
EPA 7470A		06/21/11		06/01/11	13:00	6/2/2011 13:27	
EPA 8015C		05/31/11	07/04/11	05/25/11	13:00	5/26/2011 00:13	
EPA 8015C		06/07/11		05/31/11	10:00	5/31/2011 14:23	
EPA 8015C		06/07/11		05/31/11	10:38	5/31/2011 20:48	
SM18 3500 Cr-D		05/25/11	15:32	05/25/11	12:05	5/25/2011 13:05	

<b>Client ID:</b>	<b>MW-12</b>	<b>Lab ID:</b>	<b>B102269-10RE1</b>	<b>Sampled:</b>	<b>05/24/11 15:32</b>	<b>Received:</b>	<b>05/25/11 10:15</b>
<b>Parameter</b>		<b>Hold Date/Time(s)</b>		<b>Prep Date/Time(s)</b>		<b>Analysis Date/Time(s)</b>	
EPA 8260B		06/07/11		05/26/11	18:38	5/31/2011 16:35	



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Client ID:	MW-13	Lab ID:	B102269-11	Sampled:	05/24/11 16:00	Received:	05/25/11 10:15
Parameter		Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)	
EPA 1664A		06/21/11		05/26/11	11:27	5/31/2011 09:08	
EPA 6010C		11/20/11		05/27/11	09:42	5/31/2011 13:02	
EPA 6020A		11/20/11		05/26/11	10:21	5/28/2011 02:07	
EPA 7470A		06/21/11		06/01/11	13:00	6/2/2011 13:29	
EPA 8015C		05/31/11	07/04/11	05/25/11	13:00	5/26/2011 00:36	
EPA 8015C		06/07/11		05/31/11	10:00	5/31/2011 14:45	
EPA 8015C		06/07/11		05/31/11	10:38	5/31/2011 21:19	
SM18 3500 Cr-D		05/25/11	16:00	05/25/11	12:05	5/25/2011 13:05	

Client ID:	MW-13	Lab ID:	B102269-11RE1	Sampled:	05/24/11 16:00	Received:	05/25/11 10:15
Parameter		Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)	
EPA 8260B		06/07/11		05/26/11	18:38	5/31/2011 17:10	

Client ID:	MW-13	Lab ID:	B102269-11RE2	Sampled:	05/24/11 16:00	Received:	05/25/11 10:15
Parameter		Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)	
EPA 8260B		06/07/11		05/26/11	18:38	6/1/2011 10:58	

Client ID:	BAILER BLANK	Lab ID:	B102269-12	Sampled:	05/24/11 10:51	Received:	05/25/11 10:15
Parameter		Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)	
EPA 1664A		06/21/11		05/26/11	11:27	5/31/2011 09:08	
EPA 6010C		11/20/11		05/27/11	09:42	5/31/2011 13:04	
EPA 6020A		11/20/11		05/26/11	10:21	5/28/2011 02:14	
EPA 7470A		06/21/11		06/01/11	13:00	6/2/2011 13:30	
EPA 8015C		05/31/11	07/04/11	05/25/11	13:00	5/26/2011 01:00	
EPA 8015C		06/07/11		05/31/11	10:00	5/31/2011 14:56	
EPA 8015C		06/07/11		05/31/11	10:38	5/31/2011 21:50	
EPA 8260B		06/07/11		05/26/11	18:38	5/27/2011 20:28	
SM18 3500 Cr-D		05/25/11	10:51	05/25/11	10:30	5/25/2011 10:35	

Client ID:	TRIP BLANK 1	Lab ID:	B102269-13	Sampled:	05/24/11 00:00	Received:	05/25/11 10:15
Parameter		Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)	
EPA 8260B		06/07/11		05/26/11	18:38	5/27/2011 21:03	

Client ID:	TRIP BLANK 2	Lab ID:	B102269-14	Sampled:	05/24/11 00:00	Received:	05/25/11 10:15
Parameter		Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)	
EPA 8260B		06/07/11		05/26/11	18:38	5/27/2011 21:37	

Client ID:	TRIP BLANK 3	Lab ID:	B102269-15	Sampled:	05/24/11 00:00	Received:	05/25/11 10:15
Parameter		Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)	
EPA 8260B		06/07/11		05/26/11	18:38	5/27/2011 22:12	

<b>Client ID:</b>	<b>TRIP BLANK 4</b>	<b>Lab ID:</b>	<b>B102269-16</b>	<b>Sampled:</b>	<b>05/24/11 00:00</b>	<b>Received:</b>	<b>05/25/11 10:15</b>
Parameter	EPA 8260B	Hold Date/Time(s)	06/07/11	Prep Date/Time(s)	05/26/11 18:38	Analysis Date/Time(s)	5/27/2011 22:47

<b>Client ID:</b>	<b>TRIP BLANK 5</b>	<b>Lab ID:</b>	<b>B102269-17</b>	<b>Sampled:</b>	<b>05/24/11 00:00</b>	<b>Received:</b>	<b>05/25/11 10:15</b>
Parameter	EPA 8260B	Hold Date/Time(s)	06/07/11	Prep Date/Time(s)	05/26/11 18:38	Analysis Date/Time(s)	5/27/2011 23:21

<b>Client ID:</b>	<b>TRIP BLANK 6</b>	<b>Lab ID:</b>	<b>B102269-18</b>	<b>Sampled:</b>	<b>05/24/11 00:00</b>	<b>Received:</b>	<b>05/25/11 10:15</b>
Parameter	EPA 8260B	Hold Date/Time(s)	06/07/11	Prep Date/Time(s)	05/26/11 18:38	Analysis Date/Time(s)	5/27/2011 23:56

### SAMPLE DETECTION SUMMARY

<b>Client ID: MW-1</b>		<b>Lab ID: B102269-01</b>					
Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
1,1,1-Trichloroethane	71		2.0	10	ug/L	EPA 8260B	
1,1,2-Trichloroethane	9.3	I	4.0	10	ug/L	EPA 8260B	
1,1-Dichloroethane	10		3.0	10	ug/L	EPA 8260B	
1,1-Dichloroethene	1000		2.1	10	ug/L	EPA 8260B	
Beryllium - Total	0.179	I	0.100	1.00	ug/L	EPA 6010C	
cis-1,2-Dichloroethene	44		2.2	10	ug/L	EPA 8260B	
GRO (C6-C10)	0.420		0.011	0.055	mg/L	EPA 8015C	
Lead - Total	3.46	I	2.90	10.0	ug/L	EPA 6010C	
Mercury - Total	0.126	IV	0.108	0.300	ug/L	EPA 7470A	J-01
Nickel - Total	1.56	I	1.10	10.0	ug/L	EPA 6010C	
Tetrachloroethene	1000		2.1	10	ug/L	EPA 8260B	
Trichloroethene	10		2.4	10	ug/L	EPA 8260B	
Zinc - Total	5.94	I	3.50	10.0	ug/L	EPA 6010C	

<b>Client ID: MW-2</b>		<b>Lab ID: B102269-02</b>					
Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
1,1-Dichloroethane	2.0		0.30	1.0	ug/L	EPA 8260B	
Beryllium - Total	0.295	I	0.100	1.00	ug/L	EPA 6010C	
Carbon disulfide	0.52	IV	0.24	5.0	ug/L	EPA 8260B	
Chromium - Total	8.64	I	1.30	10.0	ug/L	EPA 6010C	
Copper - Total	10.6		1.50	10.0	ug/L	EPA 6010C	
DRO (C10-C28)	0.12		0.024	0.10	mg/L	EPA 8015C	
Lead - Total	9.08	I	2.90	10.0	ug/L	EPA 6010C	
Mercury - Total	0.129	IV	0.108	0.300	ug/L	EPA 7470A	J-01
Nickel - Total	13.2		1.10	10.0	ug/L	EPA 6010C	
Zinc - Total	23.4		3.50	10.0	ug/L	EPA 6010C	

<b>Client ID: MW-3</b>		<b>Lab ID: B102269-03</b>					
Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Beryllium - Total	0.136	I	0.100	1.00	ug/L	EPA 6010C	
Chromium - Total	1.86	I	1.30	10.0	ug/L	EPA 6010C	
cis-1,2-Dichloroethene	3.9		0.22	1.0	ug/L	EPA 8260B	
Mercury - Total	0.0870	IV	0.0720	0.200	ug/L	EPA 7470A	J-01
Nickel - Total	2.60	I	1.10	10.0	ug/L	EPA 6010C	
Tetrachloroethene	0.64	I	0.21	1.0	ug/L	EPA 8260B	
Trichloroethene	0.42	I	0.24	1.0	ug/L	EPA 8260B	
Zinc - Total	5.12	I	3.50	10.0	ug/L	EPA 6010C	

<b>Client ID: MW-4</b>		<b>Lab ID: B102269-04</b>					
Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Beryllium - Total	0.118	I	0.100	1.00	ug/L	EPA 6010C	
Chromium - Total	1.60	I	1.30	10.0	ug/L	EPA 6010C	
cis-1,2-Dichloroethene	84		1.1	5.0	ug/L	EPA 8260B	
Copper - Total	1.67	I	1.50	10.0	ug/L	EPA 6010C	
GRO (C6-C10)	0.266		0.011	0.055	mg/L	EPA 8015C	
Lead - Total	3.50	I	2.90	10.0	ug/L	EPA 6010C	
Mercury - Total	0.127	IV	0.108	0.300	ug/L	EPA 7470A	J-01
Nickel - Total	1.80	I	1.10	10.0	ug/L	EPA 6010C	
Tetrachloroethene	600		1.0	5.0	ug/L	EPA 8260B	

<b>Client ID: MW-4</b>		<b>Lab ID: B102269-04</b>					
Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Trichloroethene	78		1.2	5.0	ug/L	EPA 8260B	
Zinc - Total	4.92	I	3.50	10.0	ug/L	EPA 6010C	
<b>Client ID: MW-5</b>		<b>Lab ID: B102269-05</b>					
Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
1,1-Dichloroethane	0.77	I	0.30	1.0	ug/L	EPA 8260B	
Cadmium - Total	0.396	I	0.370	1.00	ug/L	EPA 6010C	
Chromium - Total	1.64	I	1.30	10.0	ug/L	EPA 6010C	
DRO (C10-C28)	0.039	I	0.024	0.10	mg/L	EPA 8015C	
Lead - Total	3.37	I	2.90	10.0	ug/L	EPA 6010C	
Mercury - Total	0.0862	IV	0.0720	0.200	ug/L	EPA 7470A	J-01
Nickel - Total	2.90	I	1.10	10.0	ug/L	EPA 6010C	
Zinc - Total	5.88	I	3.50	10.0	ug/L	EPA 6010C	
<b>Client ID: MW-6</b>		<b>Lab ID: B102269-06</b>					
Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
1,1-Dichloroethane	0.92	I	0.30	1.0	ug/L	EPA 8260B	
1,1-Dichloroethene	31		0.21	1.0	ug/L	EPA 8260B	
1,2-Dichloroethane	0.63	I	0.28	1.0	ug/L	EPA 8260B	
Antimony - Total	2.38	I	0.950	20.0	ug/L	EPA 6020A	
Arsenic - Total	663		33.5	50.0	ug/L	EPA 6010C	
Beryllium - Total	25.4		0.500	5.00	ug/L	EPA 6010C	
Cadmium - Total	2.29	I	1.85	5.00	ug/L	EPA 6010C	
Chromium - Total	186		6.50	50.0	ug/L	EPA 6010C	
cis-1,2-Dichloroethene	3.8		0.22	1.0	ug/L	EPA 8260B	
Copper - Total	952		7.50	50.0	ug/L	EPA 6010C	
DRO (C10-C28)	0.13		0.024	0.10	mg/L	EPA 8015C	
GRO (C6-C10)	0.018	I	0.011	0.055	mg/L	EPA 8015C	
Lead - Total	1650		14.5	50.0	ug/L	EPA 6010C	
Mercury - Total	0.848	V	0.216	0.600	ug/L	EPA 7470A	J-01
Nickel - Total	77.4		5.50	50.0	ug/L	EPA 6010C	
Tetrachloroethene	26		0.21	1.0	ug/L	EPA 8260B	
Thallium - Total	1.30		0.410	1.00	ug/L	EPA 6020A	
Trichloroethene	9.6		0.24	1.0	ug/L	EPA 8260B	
Zinc - Total	176		17.5	50.0	ug/L	EPA 6010C	
<b>Client ID: MW-7</b>		<b>Lab ID: B102269-07</b>					
Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
1,1-Dichloroethene	18		1.0	5.0	ug/L	EPA 8260B	
Arsenic - Total	11.8		6.70	10.0	ug/L	EPA 6010C	
Beryllium - Total	0.391	I	0.100	1.00	ug/L	EPA 6010C	
Chromium - Total	14.8		1.30	10.0	ug/L	EPA 6010C	
Copper - Total	12.0		1.50	10.0	ug/L	EPA 6010C	
DRO (C10-C28)	0.028	I	0.024	0.10	mg/L	EPA 8015C	
GRO (C6-C10)	0.063		0.011	0.055	mg/L	EPA 8015C	
Lead - Total	9.35	I	2.90	10.0	ug/L	EPA 6010C	
Mercury - Total	0.0849	IV	0.0720	0.200	ug/L	EPA 7470A	J-01
Nickel - Total	9.59	I	1.10	10.0	ug/L	EPA 6010C	
Tetrachloroethene	160		1.0	5.0	ug/L	EPA 8260B	
Trichloroethene	1.2	I	1.2	5.0	ug/L	EPA 8260B	
Zinc - Total	22.9		3.50	10.0	ug/L	EPA 6010C	



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Client ID: MW-8		Lab ID: B102269-08						
Analyte		Results	Flag	MDL	PQL	Units	Method	Notes
Arsenic - Total		13.0		6.70	10.0	ug/L	EPA 6010C	
Beryllium - Total		0.498	I	0.100	1.00	ug/L	EPA 6010C	
Cadmium - Total		1.05		0.370	1.00	ug/L	EPA 6010C	
Chromium - Total		18.0		1.30	10.0	ug/L	EPA 6010C	
Copper - Total		21.3		1.50	10.0	ug/L	EPA 6010C	
GRO (C6-C10)		1.04		0.011	0.055	mg/L	EPA 8015C	
Lead - Total		18.7		2.90	10.0	ug/L	EPA 6010C	
Mercury - Total		0.327	IV	0.216	0.600	ug/L	EPA 7470A	J-01
Nickel - Total		20.9		1.10	10.0	ug/L	EPA 6010C	
Zinc - Total		50.9		3.50	10.0	ug/L	EPA 6010C	

Client ID: MW-8		Lab ID: B102269-08RE1						
Analyte		Results	Flag	MDL	PQL	Units	Method	Notes
1,1-Dichloroethene		88		10	50	ug/L	EPA 8260B	
cis-1,2-Dichloroethene		78		11	50	ug/L	EPA 8260B	
Tetrachloroethene		2700		10	50	ug/L	EPA 8260B	
Trichloroethene		86		12	50	ug/L	EPA 8260B	

Client ID: MW-8D		Lab ID: B102269-09						
Analyte		Results	Flag	MDL	PQL	Units	Method	Notes
Arsenic - Total		10.7		6.70	10.0	ug/L	EPA 6010C	
Beryllium - Total		0.398	I	0.100	1.00	ug/L	EPA 6010C	
Cadmium - Total		0.518	I	0.370	1.00	ug/L	EPA 6010C	
Chromium - Total		13.4		1.30	10.0	ug/L	EPA 6010C	
Copper - Total		15.7		1.50	10.0	ug/L	EPA 6010C	
DRO (C10-C28)		0.035	I	0.024	0.10	mg/L	EPA 8015C	
GRO (C6-C10)		0.982		0.011	0.055	mg/L	EPA 8015C	
Lead - Total		14.4		2.90	10.0	ug/L	EPA 6010C	
Mercury - Total		0.346	IV	0.216	0.600	ug/L	EPA 7470A	J-01
Nickel - Total		16.3		1.10	10.0	ug/L	EPA 6010C	
Zinc - Total		40.0		3.50	10.0	ug/L	EPA 6010C	

Client ID: MW-8D		Lab ID: B102269-09RE1						
Analyte		Results	Flag	MDL	PQL	Units	Method	Notes
cis-1,2-Dichloroethene		68		11	50	ug/L	EPA 8260B	
Tetrachloroethene		3300		10	50	ug/L	EPA 8260B	
Trichloroethene		84		12	50	ug/L	EPA 8260B	

Client ID: MW-12		Lab ID: B102269-10						
Analyte		Results	Flag	MDL	PQL	Units	Method	Notes
Beryllium - Total		0.220	I	0.100	1.00	ug/L	EPA 6010C	
Cadmium - Total		0.384	I	0.370	1.00	ug/L	EPA 6010C	
Chromium - Total		2.10	I	1.30	10.0	ug/L	EPA 6010C	
Copper - Total		8.45	I	1.50	10.0	ug/L	EPA 6010C	
GRO (C6-C10)		0.023	I	0.011	0.055	mg/L	EPA 8015C	
Lead - Total		7.22	I	2.90	10.0	ug/L	EPA 6010C	
Mercury - Total		0.133	IV	0.108	0.300	ug/L	EPA 7470A	J-01
Nickel - Total		11.4		1.10	10.0	ug/L	EPA 6010C	
Zinc - Total		11.0		3.50	10.0	ug/L	EPA 6010C	

<b>Client ID: MW-13</b>		<b>Lab ID: B102269-11</b>						
<b>Analyte</b>		<b>Results</b>	<b>Flag</b>	<b>MDL</b>	<b>PQL</b>	<b>Units</b>	<b>Method</b>	<b>Notes</b>
Beryllium - Total		0.110	I	0.100	1.00	ug/L	EPA 6010C	
Chromium - Total		1.52	I	1.30	10.0	ug/L	EPA 6010C	
DRO (C10-C28)		0.092	I	0.024	0.10	mg/L	EPA 8015C	
GRO (C6-C10)		0.035	I	0.011	0.055	mg/L	EPA 8015C	
Mercury - Total		0.0837	IV	0.0720	0.200	ug/L	EPA 7470A	J-01
Nickel - Total		2.50	I	1.10	10.0	ug/L	EPA 6010C	
Zinc - Total		4.78	I	3.50	10.0	ug/L	EPA 6010C	

<b>Client ID: MW-13</b>		<b>Lab ID: B102269-11RE1</b>						
<b>Analyte</b>		<b>Results</b>	<b>Flag</b>	<b>MDL</b>	<b>PQL</b>	<b>Units</b>	<b>Method</b>	<b>Notes</b>
1,1,1-Trichloroethane		0.58	I	0.20	1.0	ug/L	EPA 8260B	
Acetone		7.4		1.1	5.0	ug/L	EPA 8260B	
Chloroform		2.3		0.21	1.0	ug/L	EPA 8260B	
cis-1,2-Dichloroethene		22		0.22	1.0	ug/L	EPA 8260B	
Tetrachloroethene		67		0.21	1.0	ug/L	EPA 8260B	
Trichloroethene		4.4		0.24	1.0	ug/L	EPA 8260B	

<b>Client ID: MW-13</b>		<b>Lab ID: B102269-11RE2</b>						
<b>Analyte</b>		<b>Results</b>	<b>Flag</b>	<b>MDL</b>	<b>PQL</b>	<b>Units</b>	<b>Method</b>	<b>Notes</b>
1,1-Dichloroethene		150		1.0	5.0	ug/L	EPA 8260B	

<b>Client ID: BAILER BLANK</b>		<b>Lab ID: B102269-12</b>						
<b>Analyte</b>		<b>Results</b>	<b>Flag</b>	<b>MDL</b>	<b>PQL</b>	<b>Units</b>	<b>Method</b>	<b>Notes</b>
Mercury - Total		0.0851	IV	0.0720	0.200	ug/L	EPA 7470A	J-01

### ANALYTICAL RESULTS

**Description:** MW-1

**Lab Sample ID:** B102269-01

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 13:50

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

#### Volatile Organic Compounds by GCMS

*^ - ENCO Jacksonville certified analyte [NC 442]*

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	2.0	U	ug/L	1	2.0	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
1,1,1-Trichloroethane [71-55-6] ^	71		ug/L	1	2.0	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
1,1,2,2-Tetrachloroethane [79-34-5] ^	3.2	U	ug/L	1	3.2	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
1,1,2-Trichloroethane [79-00-5] ^	9.3	I	ug/L	1	4.0	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
1,1-Dichloroethane [75-34-3] ^	10		ug/L	1	3.0	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
1,1-Dichloroethene [75-35-4] ^	1000		ug/L	1	2.1	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
1,1-Dichloropropene [563-58-6] ^	2.1	U	ug/L	1	2.1	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
1,2,3-Trichlorobenzene [87-61-6] ^	5.0	U	ug/L	1	5.0	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
1,2,3-Trichloropropane [96-18-4] ^	3.0	U	ug/L	1	3.0	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
1,2,4-Trichlorobenzene [120-82-1] ^	4.1	U	ug/L	1	4.1	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
1,2,4-Trimethylbenzene [95-63-6] ^	2.8	U	ug/L	1	2.8	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
1,2-Dibromo-3-chloropropane [96-12-8] ^	6.0	U	ug/L	1	6.0	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
1,2-Dibromoethane [106-93-4] ^	2.7	U	ug/L	1	2.7	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
1,2-Dichlorobenzene [95-50-1] ^	2.4	U	ug/L	1	2.4	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
1,2-Dichloroethane [107-06-2] ^	2.8	U	ug/L	1	2.8	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
1,2-Dichloropropane [78-87-5] ^	3.0	U	ug/L	1	3.0	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
1,3,5-Trimethylbenzene [108-67-8] ^	2.6	U	ug/L	1	2.6	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
1,3-Dichlorobenzene [541-73-1] ^	2.7	U	ug/L	1	2.7	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
1,3-Dichloropropane [142-28-9] ^	2.5	U	ug/L	1	2.5	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
1,4-Dichlorobenzene [106-46-7] ^	2.3	U	ug/L	1	2.3	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
2,2-Dichloropropane [594-20-7] ^	4.0	U	ug/L	1	4.0	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
2-Butanone [78-93-3] ^	3.8	U	ug/L	1	3.8	50	1E26018	EPA 8260B	05/27/11 10:04	GMB	
2-Chloroethyl Vinyl Ether [110-75-8] ^	15	U	ug/L	1	15	50	1E26018	EPA 8260B	05/27/11 10:04	GMB	
2-Chlorotoluene [95-49-8] ^	3.3	U	ug/L	1	3.3	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
2-Hexanone [591-78-6] ^	5.0	U	ug/L	1	5.0	50	1E26018	EPA 8260B	05/27/11 10:04	GMB	
4-Chlorotoluene [106-43-4] ^	2.2	U	ug/L	1	2.2	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
4-Isopropyltoluene [99-87-6] ^	2.9	U	ug/L	1	2.9	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
4-Methyl-2-pentanone [108-10-1] ^	10	U	ug/L	1	10	50	1E26018	EPA 8260B	05/27/11 10:04	GMB	
Acetone [67-64-1] ^	11	U	ug/L	1	11	50	1E26018	EPA 8260B	05/27/11 10:04	GMB	
Benzene [71-43-2] ^	2.7	U	ug/L	1	2.7	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
Bromobenzene [108-86-1] ^	2.6	U	ug/L	1	2.6	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
Bromochloromethane [74-97-5] ^	2.8	U	ug/L	1	2.8	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
Bromodichloromethane [75-27-4] ^	2.0	U	ug/L	1	2.0	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
Bromoform [75-25-2] ^	3.3	U	ug/L	1	3.3	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
Bromomethane [74-83-9] ^	6.4	U	ug/L	1	6.4	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
Carbon disulfide [75-15-0] ^	2.4	U	ug/L	1	2.4	50	1E26018	EPA 8260B	05/27/11 10:04	GMB	
Carbon tetrachloride [56-23-5] ^	2.0	U	ug/L	1	2.0	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
Chlorobenzene [108-90-7] ^	2.4	U	ug/L	1	2.4	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
Chloroethane [75-00-3] ^	3.1	U	ug/L	1	3.1	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
Chloroform [67-66-3] ^	2.1	U	ug/L	1	2.1	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
Chloromethane [74-87-3] ^	3.1	U	ug/L	1	3.1	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
cis-1,2-Dichloroethene [156-59-2] ^	44		ug/L	1	2.2	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
cis-1,3-Dichloropropene [10061-01-5] ^	3.5	U	ug/L	1	3.5	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
Dibromochloromethane [124-48-1] ^	2.7	U	ug/L	1	2.7	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
Dibromomethane [74-95-3] ^	2.7	U	ug/L	1	2.7	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
Dichlorodifluoromethane [75-71-8] ^	2.9	U	ug/L	1	2.9	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
Ethylbenzene [100-41-4] ^	2.6	U	ug/L	1	2.6	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
Hexachlorobutadiene [87-68-3] ^	3.5	U	ug/L	1	3.5	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	

**Description:** MW-1

**Lab Sample ID:** B102269-01

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 13:50

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

### Volatile Organic Compounds by GCMS

<sup>a</sup> - ENCO Jacksonville certified analyte [NC 442]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Isopropylbenzene [98-82-8] ^	2.0	U	ug/L	1	2.0	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
m,p-Xylenes [108-38-3/106-42-3] ^	5.0	U	ug/L	1	5.0	20	1E26018	EPA 8260B	05/27/11 10:04	GMB	
Methylene chloride [75-09-2] ^	6.2	U	ug/L	1	6.2	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
Methyl-tert-Butyl Ether [1634-04-4] ^	2.4	U	ug/L	1	2.4	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
Naphthalene [91-20-3] ^	3.0	U	ug/L	1	3.0	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
n-Butyl Benzene [104-51-8] ^	2.8	U	ug/L	1	2.8	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
n-Propyl Benzene [103-65-1] ^	2.0	U	ug/L	1	2.0	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
o-Xylene [95-47-6] ^	2.5	U	ug/L	1	2.5	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
sec-Butylbenzene [135-98-8] ^	2.0	U	ug/L	1	2.0	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
Styrene [100-42-5] ^	3.2	U	ug/L	1	3.2	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
tert-Butylbenzene [98-06-6] ^	2.1	U	ug/L	1	2.1	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
Tetrachloroethene [127-18-4] ^	1000		ug/L	1	2.1	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
Toluene [108-88-3] ^	3.0	U	ug/L	1	3.0	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
trans-1,2-Dichloroethene [156-60-5] ^	3.0	U	ug/L	1	3.0	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
trans-1,3-Dichloropropene [10061-02-6] ^	3.3	U	ug/L	1	3.3	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
Trichloroethene [79-01-6] ^	10		ug/L	1	2.4	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
Trichlorofluoromethane [75-69-4] ^	2.0	U	ug/L	1	2.0	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
Vinyl chloride [75-01-4] ^	3.3	U	ug/L	1	3.3	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
Xylenes (Total) [1330-20-7] ^	5.0	U	ug/L	1	5.0	10	1E26018	EPA 8260B	05/27/11 10:04	GMB	
<b>Surrogates</b>											
4-Bromofluorobenzene	500	I	500		100 %	62-132	1E26018	EPA 8260B	05/27/11 10:04	GMB	
Dibromofluoromethane	530	I	500		107 %	73-134	1E26018	EPA 8260B	05/27/11 10:04	GMB	
Toluene-d8	580	I	500		116 %	66-138	1E26018	EPA 8260B	05/27/11 10:04	GMB	



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**Description:** MW-1

**Matrix:** Ground Water

**Project:** Cooper Tools

**Lab Sample ID:** B102269-01

**Sampled:** 05/24/11 13:50

**Received:** 05/25/11 10:15

**Work Order:** B102269

---

### Non-Halogenated Volatile Organics by GC

*^ - ENCO Jacksonville certified analyte [NC 442]*

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Ethylene Glycol [107-21-1] ^	4.1	U	mg/L	1	4.1	10	1E31002	EPA 8015C	05/31/11 12:45	LAC	
Propylene Glycol [57-55-6] ^	1.8	U	mg/L	1	1.8	10	1E31002	EPA 8015C	05/31/11 12:45	LAC	
<b>Surrogates</b>	<b>Results</b>	<b>DF</b>	<b>Spike Lvl</b>	<b>% Rec</b>	<b>% Rec Limits</b>		<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
1,3-Butylene Glycol	97	1	101	95.9 %	50-150		1E31002	EPA 8015C	05/31/11 12:45	LAC	

**Description:** MW-1

**Lab Sample ID:** B102269-01

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 13:50

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Diesel Range Organics by GC**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>POL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
DRO (C10-C28) [ECL-0057] ^	0.024	U	mg/L	1	0.024	0.10	1E25012	EPA 8015C	05/25/11 20:17	JSW	
<b>Surrogates</b>											
<i>o-Terphenyl</i>	<b>Results</b>	<b>DF</b>	<b>Spike Lvl</b>	<b>% Rec</b>	<b>% Rec Limits</b>		<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
	0.049	1	0.0505	98 %	63-139		1E25012	EPA 8015C	05/25/11 20:17	JSW	

**Description:** MW-1**Matrix:** Ground Water**Project:** Cooper Tools**Lab Sample ID:** B102269-01**Sampled:** 05/24/11 13:50**Sampled By:** Danny Hefner**Received:** 05/25/11 10:15**Work Order:** B102269**Metals by EPA 6000/7000 Series Methods**

^ - ENCO Jacksonville certified analyte [NC 442]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	0.126	IV	ug/L	1	0.108	0.300	1E31012	EPA 7470A	06/02/11 13:08	LTS	J-01

**Description:** MW-1

**Lab Sample ID:** B102269-01

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 13:50

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Metals (total recoverable) by EPA 6000/7000 Series Methods**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Arsenic [7440-38-2] ^	6.70	U	ug/L	1	6.70	10.0	1E27013	EPA 6010C	05/31/11 11:48	ACV	
Beryllium [7440-41-7] ^	<b>0.179</b>	I	ug/L	1	0.100	1.00	1E27013	EPA 6010C	05/31/11 11:48	ACV	
Cadmium [7440-43-9] ^	0.370	U	ug/L	1	0.370	1.00	1E27013	EPA 6010C	05/31/11 11:48	ACV	
Chromium [7440-47-3] ^	1.30	U	ug/L	1	1.30	10.0	1E27013	EPA 6010C	05/31/11 11:48	ACV	
Copper [7440-50-8] ^	1.50	U	ug/L	1	1.50	10.0	1E27013	EPA 6010C	05/31/11 11:48	ACV	
Lead [7439-92-1] ^	<b>3.46</b>	I	ug/L	1	2.90	10.0	1E27013	EPA 6010C	05/31/11 11:48	ACV	
Nickel [7440-02-0] ^	<b>1.56</b>	I	ug/L	1	1.10	10.0	1E27013	EPA 6010C	05/31/11 11:48	ACV	
Selenium [7782-49-2] ^	8.90	U	ug/L	1	8.90	10.0	1E27013	EPA 6010C	05/31/11 11:48	ACV	
Silver [7440-22-4] ^	1.50	U	ug/L	1	1.50	10.0	1E27013	EPA 6010C	05/31/11 11:48	ACV	
Zinc [7440-66-6] ^	<b>5.94</b>	I	ug/L	1	3.50	10.0	1E27013	EPA 6010C	05/31/11 11:48	ACV	

**Description:** MW-1

**Lab Sample ID:** B102269-01

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 13:50

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

### Classical Chemistry Parameters

<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	POL	Batch	Method	Analyzed	By	Notes
Hexavalent Chromium [1854-02-99] ^	0.004	U	mg/L	1	0.004	0.030	1E25010	SM18 3500 Cr-D	05/25/11 13:05	sma	
Oil & Grease (HEM) [C-0007] ^	3.00	U	mg/L	1	3.00	5.00	1E26006	EPA 1664A	05/31/11 09:08	MJF	

**Description:** MW-1

**Lab Sample ID:** B102269-01

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 13:50

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Metals (total recoverable) by EPA 6000/7000 Series Methods**
<sup>^</sup> ~ ENCO Orlando certified analyte [NC 424]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>POL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Antimony [7440-36-0] ^	0.950	U	ug/L	1	0.950	20.0	1E26014	EPA 6020A	05/27/11 23:31	JMA	
Thallium [7440-28-0] ^	0.410	U	ug/L	1	0.410	1.00	1E26014	EPA 6020A	05/27/11 23:31	JMA	

**Description:** MW-1

**Lab Sample ID:** B102269-01

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 13:50

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Gasoline Range Organics by GC**
<sup>^</sup> - ENCO Cary certified analyte [NC 591]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>POL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
GRO (C6-C10) [ECL-0069] ^	0.420		mg/L	1	0.011	0.055	1E31012	EPA 8015C	05/31/11 15:35	bpk	
<b>Surrogates</b>											
2,5-Dibromotoluene	0.0696	1	0.100	70 %	70-130		1E31012	EPA 8015C	05/31/11 15:35	bpk	Notes

**Description:** MW-2

**Lab Sample ID:** B102269-02

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 14:14

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

### Volatile Organic Compounds by GCMS

<sup>^</sup> - ENCO Jacksonville certified analyte [INC 442]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	POL	Batch	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
1,1,1-Trichloroethane [71-55-6] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.32	U	ug/L	1	0.32	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
1,1,2-Trichloroethane [79-00-5] ^	0.40	U	ug/L	1	0.40	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
<b>1,1-Dichloroethane [75-34-3] ^</b>	<b>2.0</b>		ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
1,1-Dichloropropene [563-58-6] ^	0.21	U	ug/L	1	0.21	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
1,2,3-Trichlorobenzene [87-61-6] ^	0.50	U	ug/L	1	0.50	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
1,2,3-Trichloropropane [96-18-4] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
1,2,4-Trichlorobenzene [120-82-1] ^	0.41	U	ug/L	1	0.41	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
1,2,4-Trimethylbenzene [95-63-6] ^	0.28	U	ug/L	1	0.28	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.60	U	ug/L	1	0.60	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
1,2-Dibromoethane [106-93-4] ^	0.27	U	ug/L	1	0.27	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
1,2-Dichlorobenzene [95-50-1] ^	0.24	U	ug/L	1	0.24	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
1,2-Dichloroethane [107-06-2] ^	0.28	U	ug/L	1	0.28	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
1,2-Dichloropropane [78-87-5] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
1,3,5-Trimethylbenzene [108-67-8] ^	0.26	U	ug/L	1	0.26	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
1,3-Dichlorobenzene [541-73-1] ^	0.27	U	ug/L	1	0.27	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
1,3-Dichloropropane [142-28-9] ^	0.25	U	ug/L	1	0.25	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
1,4-Dichlorobenzene [106-46-7] ^	0.23	U	ug/L	1	0.23	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
2,2-Dichloropropane [594-20-7] ^	0.40	U	ug/L	1	0.40	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
2-Butanone [78-93-3] ^	0.38	U	ug/L	1	0.38	5.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
2-Chloroethyl Vinyl Ether [110-75-8] ^	1.5	U	ug/L	1	1.5	5.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
2-Chlorotoluene [95-49-8] ^	0.33	U	ug/L	1	0.33	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
2-Hexanone [591-78-6] ^	0.50	U	ug/L	1	0.50	5.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
4-Chlorotoluene [106-43-4] ^	0.22	U	ug/L	1	0.22	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
4-Isopropyltoluene [99-87-6] ^	0.29	U	ug/L	1	0.29	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
4-Methyl-2-pentanone [108-10-1] ^	1.0	U	ug/L	1	1.0	5.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
Acetone [67-64-1] ^	1.1	U	ug/L	1	1.1	5.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
Benzene [71-43-2] ^	0.27	U	ug/L	1	0.27	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
Bromobenzene [108-86-1] ^	0.26	U	ug/L	1	0.26	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
Bromochloromethane [74-97-5] ^	0.28	U	ug/L	1	0.28	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
Bromodichloromethane [75-27-4] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
Bromoform [75-25-2] ^	0.33	U	ug/L	1	0.33	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
Bromomethane [74-83-9] ^	0.64	U	ug/L	1	0.64	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
<b>Carbon disulfide [75-15-0] ^</b>	<b>0.52</b>	<b>IV</b>	ug/L	1	0.24	5.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
Carbon tetrachloride [56-23-5] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
Chlorobenzene [108-90-7] ^	0.24	U	ug/L	1	0.24	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
Chloroethane [75-00-3] ^	0.31	U	ug/L	1	0.31	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
Chloroform [67-66-3] ^	0.21	U	ug/L	1	0.21	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
Chloromethane [74-87-3] ^	0.31	U	ug/L	1	0.31	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
cis-1,2-Dichloroethene [156-59-2] ^	0.22	U	ug/L	1	0.22	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
cis-1,3-Dichloropropene [10061-01-5] ^	0.35	U	ug/L	1	0.35	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
Dibromochloromethane [124-48-1] ^	0.27	U	ug/L	1	0.27	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
Dichlorodifluoromethane [75-71-8] ^	0.29	U	ug/L	1	0.29	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
Ethylbenzene [100-41-4] ^	0.26	U	ug/L	1	0.26	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
Hexachlorobutadiene [87-68-3] ^	0.35	U	ug/L	1	0.35	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
Isopropylbenzene [98-82-8] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
m,p-Xylenes [108-38-3/106-42-3] ^	0.50	U	ug/L	1	0.50	2.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
Methylene chloride [75-09-2] ^	0.62	U	ug/L	1	0.62	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	



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**Description:** MW-2**Lab Sample ID:** B102269-02**Received:** 05/25/11 10:15**Matrix:** Ground Water**Sampled:** 05/24/11 14:14**Work Order:** B102269**Project:** Cooper Tools**Sampled By:** Danny Hefner**Volatile Organic Compounds by GCMS***^ - ENCO Jacksonville certified analyte [NC 442]*

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Methyl-tert-Butyl Ether [1634-04-4] ^	0.24	U	ug/L	1	0.24	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
Naphthalene [91-20-3] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
n-Butyl Benzene [104-51-8] ^	0.28	U	ug/L	1	0.28	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
n-Propyl Benzene [103-65-1] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
o-Xylene [95-47-6] ^	0.25	U	ug/L	1	0.25	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
sec-Butylbenzene [135-98-8] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
Styrene [100-42-5] ^	0.32	U	ug/L	1	0.32	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
tert-Butylbenzene [98-06-6] ^	0.21	U	ug/L	1	0.21	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
Tetrachloroethene [127-18-4] ^	0.21	U	ug/L	1	0.21	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
Toluene [108-88-3] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
trans-1,2-Dichloroethene [156-60-5] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
trans-1,3-Dichloropropene [10061-02-6] ^	0.33	U	ug/L	1	0.33	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
Trichloroethene [79-01-6] ^	0.24	U	ug/L	1	0.24	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
Trichlorofluoromethane [75-69-4] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
Vinyl chloride [75-01-4] ^	0.33	U	ug/L	1	0.33	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
Xylenes (Total) [1330-20-7] ^	0.50	U	ug/L	1	0.50	1.0	1E26018	EPA 8260B	05/28/11 00:30	GMB	
<b>Surrogates</b>	<b>Results</b>	<b>DF</b>	<b>Spike Lvl</b>	<b>% Rec</b>	<b>% Rec Limits</b>		<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
4-Bromofluorobenzene	50	1	50.0	99 %	62-132		1E26018	EPA 8260B	05/28/11 00:30	GMB	
Dibromofluoromethane	53	1	50.0	106 %	73-134		1E26018	EPA 8260B	05/28/11 00:30	GMB	
Toluene-d8	58	1	50.0	116 %	66-138		1E26018	EPA 8260B	05/28/11 00:30	GMB	

**Description:** MW-2

**Lab Sample ID:** B102269-02

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 14:14

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Non-Halogenated Volatile Organics by GC**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyst [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Ethylene Glycol [107-21-1] ^	4.1	U	mg/L	1	4.1	10	1E31002	EPA 8015C	05/31/11 12:56	LAC	
Propylene Glycol [57-55-6] ^	1.8	U	mg/L	1	1.8	10	1E31002	EPA 8015C	05/31/11 12:56	LAC	
<b>Surrogates</b>	<b>Results</b>	<b>DF</b>	<b>Spike Lvl</b>	<b>% Rec</b>	<b>% Rec Limits</b>		<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
1,3-Butylene Glycol	100	1	101	103 %	50-150		1E31002	EPA 8015C	05/31/11 12:56	LAC	

**Description:** MW-2

**Lab Sample ID:** B102269-02

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 14:14

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Diesel Range Organics by GC**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
DRO (C10-C28) [ECL-0057] ^	0.12		mg/L	1	0.024	0.10	1E25012	EPA 8015C	05/25/11 20:41	JSW	
<b>Surrogates</b>											
<i>o-Terphenyl</i>	Results	DF	Spike Lvl	% Rec	% Rec Limits		Batch	Method	Analyzed	By	Notes
	0.051	1	0.0515	100 %	63-139		1E25012	EPA 8015C	05/25/11 20:41	JSW	

**Description:** MW-2**Lab Sample ID:** B102269-02**Received:** 05/25/11 10:15**Matrix:** Ground Water**Sampled:** 05/24/11 14:14**Work Order:** B102269**Project:** Cooper Tools**Sampled By:** Danny Hefner**Metals by EPA 6000/7000 Series Methods**

^ - ENCO Jacksonville certified analyte [INC 442]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	POL	Batch	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	0.129	IV	ug/L	1	0.108	0.300	1E31012	EPA 7470A	06/02/11 13:10	LTS	J-01

**Description:** MW-2

**Lab Sample ID:** B102269-02

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 14:14

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Metals (total recoverable) by EPA 6000/7000 Series Methods**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Arsenic [7440-38-2] ^	6.70	U	ug/L	1	6.70	10.0	1E27013	EPA 6010C	05/31/11 11:49	ACV	
Beryllium [7440-41-7] ^	<b>0.295</b>	I	ug/L	1	0.100	1.00	1E27013	EPA 6010C	05/31/11 11:49	ACV	
Cadmium [7440-43-9] ^	0.370	U	ug/L	1	0.370	1.00	1E27013	EPA 6010C	05/31/11 11:49	ACV	
Chromium [7440-47-3] ^	<b>8.64</b>	I	ug/L	1	1.30	10.0	1E27013	EPA 6010C	05/31/11 11:49	ACV	
Copper [7440-50-8] ^	<b>10.6</b>		ug/L	1	1.50	10.0	1E27013	EPA 6010C	05/31/11 11:49	ACV	
Lead [7439-92-1] ^	<b>9.08</b>	I	ug/L	1	2.90	10.0	1E27013	EPA 6010C	05/31/11 11:49	ACV	
Nickel [7440-02-0] ^	<b>13.2</b>		ug/L	1	1.10	10.0	1E27013	EPA 6010C	05/31/11 11:49	ACV	
Selenium [7782-49-2] ^	8.90	U	ug/L	1	8.90	10.0	1E27013	EPA 6010C	05/31/11 11:49	ACV	
Silver [7440-22-4] ^	1.50	U	ug/L	1	1.50	10.0	1E27013	EPA 6010C	05/31/11 11:49	ACV	
Zinc [7440-66-6] ^	<b>23.4</b>		ug/L	1	3.50	10.0	1E27013	EPA 6010C	05/31/11 11:49	ACV	

**Description:** MW-2

**Lab Sample ID:** B102269-02

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 14:14

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Classical Chemistry Parameters**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Hexavalent Chromium [1854-02-99] ^	0.004	U	mg/L	1	0.004	0.030	1E25010	SM18 3500 Cr-D	05/25/11 13:05	sma	FILT
Oil & Grease (HEM) [C-0007] ^	3.00	U	mg/L	1	3.00	5.00	1E26006	EPA 1664A	05/31/11 09:08	MJF	

**Description:** MW-2

**Lab Sample ID:** B102269-02

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 14:14

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Metals (total recoverable) by EPA 6000/7000 Series Methods**
<sup>^</sup> - ENCO Orlando certified analyte [NC 424]

<b>Analyst [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Antimony [7440-36-0] ^	0.950	U	ug/L	1	0.950	20.0	1E26014	EPA 6020A	05/28/11 00:13	JMA	
Thallium [7440-28-0] ^	0.410	U	ug/L	1	0.410	1.00	1E26014	EPA 6020A	05/28/11 00:13	JMA	

**Description:** MW-2

**Lab Sample ID:** B102269-02

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 14:14

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Gasoline Range Organics by GC**
<sup>^</sup> - ENCO Cary certified analyte [NC 591]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
GRO (C6-C10) [ECL-0069] ^	0.011	U	mg/L	1	0.011	0.055	1E31012	EPA 8015C	05/31/11 16:06	bpk	
<b>Surrogates</b>											
2,5-Dibromotoluene	0.0826	1	0.100	83 %	70-130		1E31012	EPA 8015C	05/31/11 16:06	bpk	



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**Description:** MW-3**Lab Sample ID:** B102269-03**Received:** 05/25/11 10:15**Matrix:** Ground Water**Sampled:** 05/24/11 13:59**Work Order:** B102269**Project:** Cooper Tools**Sampled By:** Danny Hefner**Volatile Organic Compounds by GCMS**

^ - ENCO Jacksonville certified analyte [NC 442]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
1,1,1-Trichloroethane [71-55-6] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.32	U	ug/L	1	0.32	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
1,1,2-Trichloroethane [79-00-5] ^	0.40	U	ug/L	1	0.40	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
1,1-Dichloroethane [75-34-3] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
1,1-Dichloropropene [563-58-6] ^	0.21	U	ug/L	1	0.21	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
1,2,3-Trichlorobenzene [87-61-6] ^	0.50	U	ug/L	1	0.50	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
1,2,3-Trichloropropane [96-18-4] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
1,2,4-Trichlorobenzene [120-82-1] ^	0.41	U	ug/L	1	0.41	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
1,2,4-Trimethylbenzene [95-63-6] ^	0.28	U	ug/L	1	0.28	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.60	U	ug/L	1	0.60	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
1,2-Dibromoethane [106-93-4] ^	0.27	U	ug/L	1	0.27	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
1,2-Dichlorobenzene [95-50-1] ^	0.24	U	ug/L	1	0.24	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
1,2-Dichloroethane [107-06-2] ^	0.28	U	ug/L	1	0.28	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
1,2-Dichloropropane [78-87-5] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
1,3,5-Trimethylbenzene [108-67-8] ^	0.26	U	ug/L	1	0.26	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
1,3-Dichlorobenzene [541-73-1] ^	0.27	U	ug/L	1	0.27	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
1,3-Dichloropropane [142-28-9] ^	0.25	U	ug/L	1	0.25	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
1,4-Dichlorobenzene [106-46-7] ^	0.23	U	ug/L	1	0.23	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
2,2-Dichloropropane [594-20-7] ^	0.40	U	ug/L	1	0.40	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
2-Butanone [78-93-3] ^	0.38	U	ug/L	1	0.38	5.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
2-Chloroethyl Vinyl Ether [110-75-8] ^	1.5	U	ug/L	1	1.5	5.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
2-Chlorotoluene [95-49-8] ^	0.33	U	ug/L	1	0.33	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
2-Hexanone [591-78-6] ^	0.50	U	ug/L	1	0.50	5.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
4-Chlorotoluene [106-43-4] ^	0.22	U	ug/L	1	0.22	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
4-Isopropyltoluene [99-87-6] ^	0.29	U	ug/L	1	0.29	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
4-Methyl-2-pentanone [108-10-1] ^	1.0	U	ug/L	1	1.0	5.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
Acetone [67-64-1] ^	1.1	U	ug/L	1	1.1	5.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
Benzene [71-43-2] ^	0.27	U	ug/L	1	0.27	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
Bromobenzene [108-86-1] ^	0.26	U	ug/L	1	0.26	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
Bromochloromethane [74-97-5] ^	0.28	U	ug/L	1	0.28	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
Bromodichloromethane [75-27-4] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
Bromoform [75-25-2] ^	0.33	U	ug/L	1	0.33	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
Bromomethane [74-83-9] ^	0.64	U	ug/L	1	0.64	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
Carbon disulfide [75-15-0] ^	0.24	U	ug/L	1	0.24	5.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
Carbon tetrachloride [56-23-5] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
Chlorobenzene [108-90-7] ^	0.24	U	ug/L	1	0.24	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
Chloroethane [75-00-3] ^	0.31	U	ug/L	1	0.31	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
Chloroform [67-66-3] ^	0.21	U	ug/L	1	0.21	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
Chloromethane [74-87-3] ^	0.31	U	ug/L	1	0.31	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
cis-1,2-Dichloroethene [156-59-2] ^	3.9	ug/L	ug/L	1	0.22	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
cis-1,3-Dichloropropene [10061-01-5] ^	0.35	U	ug/L	1	0.35	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
Dibromochloromethane [124-48-1] ^	0.27	U	ug/L	1	0.27	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
Dichlorodifluoromethane [75-71-8] ^	0.29	U	ug/L	1	0.29	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
Ethylbenzene [100-41-4] ^	0.26	U	ug/L	1	0.26	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
Hexachlorobutadiene [87-68-3] ^	0.35	U	ug/L	1	0.35	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
Isopropylbenzene [98-82-8] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
m,p-Xylenes [108-38-3/106-42-3] ^	0.50	U	ug/L	1	0.50	2.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
Methylene chloride [75-09-2] ^	0.62	U	ug/L	1	0.62	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	

**Description:** MW-3

**Lab Sample ID:** B102269-03

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 13:59

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Volatile Organic Compounds by GCMS**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Methyl-tert-Butyl Ether [1634-04-4] ^	0.24	U	ug/L	1	0.24	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
Naphthalene [91-20-3] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
n-Butyl Benzene [104-51-8] ^	0.28	U	ug/L	1	0.28	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
n-Propyl Benzene [103-65-1] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
o-Xylene [95-47-6] ^	0.25	U	ug/L	1	0.25	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
sec-Butylbenzene [135-98-8] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
Styrene [100-42-5] ^	0.32	U	ug/L	1	0.32	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
tert-Butylbenzene [98-06-6] ^	0.21	U	ug/L	1	0.21	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
<b>Tetrachloroethene [127-18-4] ^</b>	<b>0.64</b>	<b>I</b>	<b>ug/L</b>	<b>1</b>	<b>0.21</b>	<b>1.0</b>	<b>1E26018</b>	<b>EPA 8260B</b>	<b>05/28/11 01:05</b>	<b>GMB</b>	
Toluene [108-88-3] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
trans-1,2-Dichloroethene [156-60-5] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
trans-1,3-Dichloropropene [10061-02-6] ^	0.33	U	ug/L	1	0.33	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
<b>Trichloroethene [79-01-6] ^</b>	<b>0.42</b>	<b>I</b>	<b>ug/L</b>	<b>1</b>	<b>0.24</b>	<b>1.0</b>	<b>1E26018</b>	<b>EPA 8260B</b>	<b>05/28/11 01:05</b>	<b>GMB</b>	
Trichlorofluoromethane [75-69-4] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
Vinyl chloride [75-01-4] ^	0.33	U	ug/L	1	0.33	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
Xylenes (Total) [1330-20-7] ^	0.50	U	ug/L	1	0.50	1.0	1E26018	EPA 8260B	05/28/11 01:05	GMB	
<hr/>											
<b>Surrogates</b>	<b>Results</b>	<b>DF</b>	<b>Spike Lvl</b>	<b>% Rec</b>	<b>% Rec Limits</b>		<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
4-Bromoarobenzene	48	1	50.0	96 %	62-132		1E26018	EPA 8260B	05/28/11 01:05	GMB	
Dibromoaromethane	54	1	50.0	103 %	73-134		1E26018	EPA 8260B	05/28/11 01:05	GMB	
Toluene-d8	57	1	50.0	114 %	66-138		1E26018	EPA 8260B	05/28/11 01:05	GMB	



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**Description:** MW-3

**Lab Sample ID:** B102269-03

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 13:59

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

### Non-Halogenated Volatile Organics by GC

*^ - ENCO Jacksonville certified analyte [NC 442]*

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Ethylene Glycol [107-21-1] ^	4.1	U	mg/L	1	4.1	10	1E31002	EPA 8015C	05/31/11 13:07	LAC	
Propylene Glycol [57-55-6] ^	1.8	U	mg/L	1	1.8	10	1E31002	EPA 8015C	05/31/11 13:07	LAC	
<b>Surrogates</b>	<b>Results</b>	<b>DF</b>	<b>Spike Lvl</b>	<b>% Rec</b>	<b>% Rec Limits</b>		<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
1,3-Butylene Glycol	99	1	101	98.4 %	50-150		1E31002	EPA 8015C	05/31/11 13:07	LAC	

**Description:** MW-3

**Lab Sample ID:** B102269-03

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 13:59

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Diesel Range Organics by GC**
<sup>^</sup> - ENCO Jacksonville certified analyte [INC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>POL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
DRO (C10-C28) [ECL-0057] ^	0.024	U	mg/L	1	0.024	0.10	1E25012	EPA 8015C	05/25/11 21:04	JSW	
<b>Surrogates</b>											
<i>o-Terphenyl</i>	<b>Results</b>	<b>DF</b>	<b>Spike Lvl</b>	<b>% Rec</b>	<b>% Rec Limits</b>		<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
	0.053	1	0.0538	98 %	63-139		1E25012	EPA 8015C	05/25/11 21:04	JSW	

**Description:** MW-3**Matrix:** Ground Water**Project:** Cooper Tools**Lab Sample ID:** B102269-03**Sampled:** 05/24/11 13:59**Received:** 05/25/11 10:15**Work Order:** B102269**Metals by EPA 6000/7000 Series Methods**

^ - ENCO Jacksonville certified analyte [NC 442]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	0.0870	IV	ug/L	1	0.0720	0.200	1E31012	EPA 7470A	06/02/11 13:11	LTS	J-01

**Description:** MW-3

**Lab Sample ID:** B102269-03

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 13:59

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Metals (total recoverable) by EPA 6000/7000 Series Methods**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Arsenic [7440-38-2] ^	6.70	U	ug/L	1	6.70	10.0	1E27013	EPA 6010C	05/31/11 11:51	ACV	
Beryllium [7440-41-7] ^	0.136	I	ug/L	1	0.100	1.00	1E27013	EPA 6010C	05/31/11 11:51	ACV	
Cadmium [7440-43-9] ^	0.370	U	ug/L	1	0.370	1.00	1E27013	EPA 6010C	05/31/11 11:51	ACV	
Chromium [7440-47-3] ^	1.86	I	ug/L	1	1.30	10.0	1E27013	EPA 6010C	05/31/11 11:51	ACV	
Copper [7440-50-8] ^	1.50	U	ug/L	1	1.50	10.0	1E27013	EPA 6010C	05/31/11 11:51	ACV	
Lead [7439-92-1] ^	2.90	U	ug/L	1	2.90	10.0	1E27013	EPA 6010C	05/31/11 11:51	ACV	
Nickel [7440-02-0] ^	2.60	I	ug/L	1	1.10	10.0	1E27013	EPA 6010C	05/31/11 11:51	ACV	
Selenium [7782-49-2] ^	8.90	U	ug/L	1	8.90	10.0	1E27013	EPA 6010C	05/31/11 11:51	ACV	
Silver [7440-22-4] ^	1.50	U	ug/L	1	1.50	10.0	1E27013	EPA 6010C	05/31/11 11:51	ACV	
Zinc [7440-66-6] ^	5.12	I	ug/L	1	3.50	10.0	1E27013	EPA 6010C	05/31/11 11:51	ACV	

**Description:** MW-3

**Lab Sample ID:** B102269-03

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 13:59

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Classical Chemistry Parameters**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Hexavalent Chromium [1854-02-99] ^	0.004	U	mg/L	1	0.004	0.030	1E25010	SM18 3500 Cr-D	05/25/11 13:05	sma	FILT
Oil & Grease (HEM) [C-0007] ^	3.00	U	mg/L	1	3.00	5.00	1E26006	EPA 1664A	05/31/11 09:08	MJF	

**Description:** MW-3

**Lab Sample ID:** B102269-03

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 13:59

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Metals (total recoverable) by EPA 6000/7000 Series Methods**
<sup>^</sup> - ENCO Orlando certified analyte [NC 424]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Antimony [7440-36-0] ^	0.950	U	ug/L	1	0.950	20.0	1E26014	EPA 6020A	05/28/11 00:21	JMA	
Thallium [7440-28-0] ^	0.410	U	ug/L	1	0.410	1.00	1E26014	EPA 6020A	05/28/11 00:21	JMA	

**Description:** MW-3

**Lab Sample ID:** B102269-03

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 13:59

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Gasoline Range Organics by GC**
<sup>^</sup> - ENCO Cary certified analyte [NC 591]

<b>Analyst [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
GRO (C6-C10) [ECL-0069] ^	0.011	U	mg/L	1	0.011	0.055	1E31012	EPA 8015C	05/31/11 16:38	bpk	
<b>Surrogates</b>											
2,5-Dibromotoluene	0.0850	1	0.100	85 %	70-130		1E31012	EPA 8015C	05/31/11 16:38	bpk	

**Description:** MW-4

**Lab Sample ID:** B102269-04

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 14:29

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Volatile Organic Compounds by GCMS**
<sup>^</sup> - ENCO Jacksonville certified analyte [INC 442]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	POL	Batch	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	1.0	U	ug/L	5	1.0	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
1,1,1-Trichloroethane [71-55-6] ^	1.0	U	ug/L	5	1.0	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
1,1,2,2-Tetrachloroethane [79-34-5] ^	1.6	U	ug/L	5	1.6	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
1,1,2-Trichloroethane [79-00-5] ^	2.0	U	ug/L	5	2.0	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
1,1-Dichloroethane [75-34-3] ^	1.5	U	ug/L	5	1.5	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
1,1-Dichloroethene [75-35-4] ^	1.0	U	ug/L	5	1.0	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
1,1-Dichloropropene [563-58-6] ^	1.0	U	ug/L	5	1.0	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
1,2,3-Trichlorobenzene [87-61-6] ^	2.5	U	ug/L	5	2.5	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
1,2,3-Trichloropropane [96-18-4] ^	1.5	U	ug/L	5	1.5	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
1,2,4-Trichlorobenzene [120-82-1] ^	2.0	U	ug/L	5	2.0	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
1,2,4-Trimethylbenzene [95-63-6] ^	1.4	U	ug/L	5	1.4	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
1,2-Dibromo-3-chloropropane [96-12-8] ^	3.0	U	ug/L	5	3.0	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
1,2-Dibromoethane [106-93-4] ^	1.4	U	ug/L	5	1.4	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
1,2-Dichlorobenzene [95-50-1] ^	1.2	U	ug/L	5	1.2	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
1,2-Dichloroethane [107-06-2] ^	1.4	U	ug/L	5	1.4	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
1,2-Dichloropropane [78-87-5] ^	1.5	U	ug/L	5	1.5	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
1,3,5-Trimethylbenzene [108-67-8] ^	1.3	U	ug/L	5	1.3	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
1,3-Dichlorobenzene [541-73-1] ^	1.4	U	ug/L	5	1.4	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
1,3-Dichloropropane [142-28-9] ^	1.2	U	ug/L	5	1.2	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
1,4-Dichlorobenzene [106-46-7] ^	1.2	U	ug/L	5	1.2	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
2,2-Dichloropropane [594-20-7] ^	2.0	U	ug/L	5	2.0	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
2-Butanone [78-93-3] ^	1.9	U	ug/L	5	1.9	25	1E26018	EPA 8260B	05/28/11 02:49	GMB	
2-Chloroethyl Vinyl Ether [110-75-8] ^	7.5	U	ug/L	5	7.5	25	1E26018	EPA 8260B	05/28/11 02:49	GMB	
2-Chlorotoluene [95-49-8] ^	1.6	U	ug/L	5	1.6	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
2-Hexanone [591-78-6] ^	2.5	U	ug/L	5	2.5	25	1E26018	EPA 8260B	05/28/11 02:49	GMB	
4-Chlorotoluene [106-43-4] ^	1.1	U	ug/L	5	1.1	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
4-Isopropyltoluene [99-87-6] ^	1.4	U	ug/L	5	1.4	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
4-Methyl-2-pentanone [108-10-1] ^	5.0	U	ug/L	5	5.0	25	1E26018	EPA 8260B	05/28/11 02:49	GMB	
Acetone [67-64-1] ^	5.5	U	ug/L	5	5.5	25	1E26018	EPA 8260B	05/28/11 02:49	GMB	
Benzene [71-43-2] ^	1.4	U	ug/L	5	1.4	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
Bromobenzene [108-86-1] ^	1.3	U	ug/L	5	1.3	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
Bromochloromethane [74-97-5] ^	1.4	U	ug/L	5	1.4	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
Bromodichloromethane [75-27-4] ^	1.0	U	ug/L	5	1.0	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
Bromoform [75-25-2] ^	1.6	U	ug/L	5	1.6	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
Bromomethane [74-83-9] ^	3.2	U	ug/L	5	3.2	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
Carbon disulfide [75-15-0] ^	1.2	U	ug/L	5	1.2	25	1E26018	EPA 8260B	05/28/11 02:49	GMB	
Carbon tetrachloride [56-23-5] ^	1.0	U	ug/L	5	1.0	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
Chlorobenzene [108-90-7] ^	1.2	U	ug/L	5	1.2	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
Chloroethane [75-00-3] ^	1.6	U	ug/L	5	1.6	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
Chloroform [67-66-3] ^	1.0	U	ug/L	5	1.0	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
Chloromethane [74-87-3] ^	1.6	U	ug/L	5	1.6	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
cis-1,2-Dichloroethene [156-59-2] ^	84	ug/L	5	1.1	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB		
cis-1,3-Dichloropropene [10061-01-5] ^	1.8	U	ug/L	5	1.8	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
Dibromochloromethane [124-48-1] ^	1.4	U	ug/L	5	1.4	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
Dibromomethane [74-95-3] ^	1.4	U	ug/L	5	1.4	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
Dichlorodifluoromethane [75-71-8] ^	1.4	U	ug/L	5	1.4	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
Ethylbenzene [100-41-4] ^	1.3	U	ug/L	5	1.3	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
Hexachlorobutadiene [87-68-3] ^	1.8	U	ug/L	5	1.8	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
Isopropylbenzene [98-82-8] ^	1.0	U	ug/L	5	1.0	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
m,p-Xylenes [108-38-3/106-42-3] ^	2.5	U	ug/L	5	2.5	10	1E26018	EPA 8260B	05/28/11 02:49	GMB	
Methylene chloride [75-09-2] ^	3.1	U	ug/L	5	3.1	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	



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**Description:** MW-4**Lab Sample ID:** B102269-04**Received:** 05/25/11 10:15**Matrix:** Ground Water**Sampled:** 05/24/11 14:29**Work Order:** B102269**Project:** Cooper Tools**Sampled By:** Danny Hefner**Volatile Organic Compounds by GCMS**<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	POL	Batch	Method	Analyzed	By	Notes
Methyl-tert-Butyl Ether [1634-04-4] ^	1.2	U	ug/L	5	1.2	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
Naphthalene [91-20-3] ^	1.5	U	ug/L	5	1.5	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
n-Butyl Benzene [104-51-8] ^	1.4	U	ug/L	5	1.4	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
n-Propyl Benzene [103-65-1] ^	1.0	U	ug/L	5	1.0	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
o-Xylene [95-47-6] ^	1.2	U	ug/L	5	1.2	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
sec-Butylbenzene [135-98-8] ^	1.0	U	ug/L	5	1.0	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
Styrene [100-42-5] ^	1.6	U	ug/L	5	1.6	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
tert-Butylbenzene [98-06-6] ^	1.0	U	ug/L	5	1.0	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
<b>Tetrachloroethene [127-18-4] ^</b>	<b>600</b>		ug/L	5	1.0	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
Toluene [108-88-3] ^	1.5	U	ug/L	5	1.5	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
trans-1,2-Dichloroethene [156-60-5] ^	1.5	U	ug/L	5	1.5	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
trans-1,3-Dichloropropene [10061-02-6] ^	1.6	U	ug/L	5	1.6	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
<b>Trichloroethene [79-01-6] ^</b>	<b>78</b>		ug/L	5	1.2	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
Trichlorofluoromethane [75-69-4] ^	1.0	U	ug/L	5	1.0	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
Vinyl chloride [75-01-4] ^	1.6	U	ug/L	5	1.6	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
Xylenes (Total) [1330-20-7] ^	2.5	U	ug/L	5	2.5	5.0	1E26018	EPA 8260B	05/28/11 02:49	GMB	
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits		Batch	Method	Analyzed	By	Notes
4-Bromofluorobenzene	49	1	50.0	99 %	62-132		1E26018	EPA 8260B	05/28/11 02:49	GMB	
Dibromofluoromethane	53	1	50.0	106 %	73-134		1E26018	EPA 8260B	05/28/11 02:49	GMB	
Toluene-d8	58	1	50.0	116 %	66-138		1E26018	EPA 8260B	05/28/11 02:49	GMB	

**Description:** MW-4

**Lab Sample ID:** B102269-04

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 14:29

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Non-Halogenated Volatile Organics by GC**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>POL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Ethylene Glycol [107-21-1] ^	4.1	U	mg/L	1	4.1	10	1E31002	EPA 8015C	05/31/11 13:18	LAC	
Propylene Glycol [57-55-6] ^	1.8	U	mg/L	1	1.8	10	1E31002	EPA 8015C	05/31/11 13:18	LAC	
<b>Surrogates</b>	<b>Results</b>	<b>DF</b>	<b>Spike Lvl</b>	<b>% Rec</b>	<b>% Rec Limits</b>		<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
1,3-Butylene Glycol	99	1	101	97.6 %	50-150		1E31002	EPA 8015C	05/31/11 13:18	LAC	



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**Description:** MW-4

**Matrix:** Ground Water

**Project:** Cooper Tools

**Lab Sample ID:** B102269-04

**Sampled:** 05/24/11 14:29

**Received:** 05/25/11 10:15

**Work Order:** B102269

### Diesel Range Organics by GC

*^ - ENCO Jacksonville certified analyte [NC 442]*

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
DRO (C10-C28) [ECL-0057] ^	0.024	U	mg/L	1	0.024	0.10	1E25012	EPA 8015C	05/25/11 21:28	JSW	
<b>Surrogates</b>	<b>Results</b>	<b>DF</b>	<b>Spike Lvl</b>	<b>% Rec</b>	<b>% Rec Limits</b>		<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
<i>o-Terphenyl</i>	0.057	1	0.0538	106 %	63-139		1E25012	EPA 8015C	05/25/11 21:28	JSW	

**Description:** MW-4**Lab Sample ID:** B102269-04**Received:** 05/25/11 10:15**Matrix:** Ground Water**Sampled:** 05/24/11 14:29**Work Order:** B102269**Project:** Cooper Tools**Sampled By:** Danny Hefner**Metals by EPA 6000/7000 Series Methods**

^ - ENCO Jacksonville certified analyte [INC 442]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	0.127	IV	ug/L	1	0.108	0.300	1E31012	EPA 7470A	06/02/11 13:13	LTS	J-01

**Description:** MW-4

**Lab Sample ID:** B102269-04

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 14:29

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Metals (total recoverable) by EPA 6000/7000 Series Methods**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Arsenic [7440-38-2] ^	6.70	U	ug/L	1	6.70	10.0	1E27013	EPA 6010C	05/31/11 11:53	ACV	
Beryllium [7440-41-7] ^	<b>0.118</b>	I	ug/L	1	0.100	1.00	1E27013	EPA 6010C	05/31/11 11:53	ACV	
Cadmium [7440-43-9] ^	0.370	U	ug/L	1	0.370	1.00	1E27013	EPA 6010C	05/31/11 11:53	ACV	
Chromium [7440-47-3] ^	<b>1.60</b>	I	ug/L	1	1.30	10.0	1E27013	EPA 6010C	05/31/11 11:53	ACV	
Copper [7440-50-8] ^	<b>1.67</b>	I	ug/L	1	1.50	10.0	1E27013	EPA 6010C	05/31/11 11:53	ACV	
Lead [7439-92-1] ^	<b>3.50</b>	I	ug/L	1	2.90	10.0	1E27013	EPA 6010C	05/31/11 11:53	ACV	
Nickel [7440-02-0] ^	<b>1.80</b>	I	ug/L	1	1.10	10.0	1E27013	EPA 6010C	05/31/11 11:53	ACV	
Selenium [7782-49-2] ^	8.90	U	ug/L	1	8.90	10.0	1E27013	EPA 6010C	05/31/11 11:53	ACV	
Silver [7440-22-4] ^	1.50	U	ug/L	1	1.50	10.0	1E27013	EPA 6010C	05/31/11 11:53	ACV	
Zinc [7440-66-6] ^	<b>4.92</b>	I	ug/L	1	3.50	10.0	1E27013	EPA 6010C	05/31/11 11:53	ACV	

**Description:** MW-4

**Lab Sample ID:** B102269-04

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 14:29

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

### **Classical Chemistry Parameters**

<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Hexavalent Chromium [1854-02-99] ^	0.004	U	mg/L	1	0.004	0.030	1E25010	SM18 3500 Cr-D	05/25/11 13:05	sma	FILT
Oil & Grease (HEM) [C-0007] ^	3.00	U	mg/L	1	3.00	5.00	1E26006	EPA 1664A	05/31/11 09:08	MJF	

**Description:** MW-4

**Lab Sample ID:** B102269-04

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 14:29

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Metals (total recoverable) by EPA 6000/7000 Series Methods**
*^ - ENCO Orlando certified analyte [NC 424]*

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Antimony [7440-36-0] ^	0.950	U	ug/L	1	0.950	20.0	1E26014	EPA 6020A	05/28/11 01:12	JMA	
Thallium [7440-28-0] ^	0.410	U	ug/L	1	0.410	1.00	1E26014	EPA 6020A	05/28/11 01:12	JMA	

**Description:** MW-4

**Lab Sample ID:** B102269-04

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 14:29

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Gasoline Range Organics by GC**
<sup>^</sup> - ENCO Cary certified analyte [NC 591]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>POL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
GRO (C6-C10) [ECL-0069] ^	0.266		mg/L	1	0.011	0.055	1E31012	EPA 8015C	05/31/11 17:09	bpk	
<b>Surrogates</b>											
2,5-Dibromotoluene	0.0855	1	0.100	86 %	70-130		1E31012	EPA 8015C	05/31/11 17:09	bpk	Notes

**Description:** MW-5

**Lab Sample ID:** B102269-05

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 14:55

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Volatile Organic Compounds by GCMS**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
1,1,1-Trichloroethane [71-55-6] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.32	U	ug/L	1	0.32	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
1,1,2-Trichloroethane [79-00-5] ^	0.40	U	ug/L	1	0.40	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
<b>1,1-Dichloroethane [75-34-3] ^</b>	<b>0.77</b>	<b>I</b>	<b>ug/L</b>	<b>1</b>	<b>0.30</b>	<b>1.0</b>	<b>1E26018</b>	<b>EPA 8260B</b>	<b>05/28/11 01:40</b>	<b>GMB</b>	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
1,1-Dichloropropene [563-58-6] ^	0.21	U	ug/L	1	0.21	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
1,2,3-Trichlorobenzene [87-61-6] ^	0.50	U	ug/L	1	0.50	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
1,2,3-Trichloropropane [96-18-4] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
1,2,4-Trichlorobenzene [120-82-1] ^	0.41	U	ug/L	1	0.41	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
1,2,4-Trimethylbenzene [95-63-6] ^	0.28	U	ug/L	1	0.28	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.60	U	ug/L	1	0.60	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
1,2-Dibromoethane [106-93-4] ^	0.27	U	ug/L	1	0.27	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
1,2-Dichlorobenzene [95-50-1] ^	0.24	U	ug/L	1	0.24	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
1,2-Dichloroethane [107-06-2] ^	0.28	U	ug/L	1	0.28	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
1,2-Dichloropropane [78-87-5] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
1,3,5-Trimethylbenzene [108-67-8] ^	0.26	U	ug/L	1	0.26	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
1,3-Dichlorobenzene [541-73-1] ^	0.27	U	ug/L	1	0.27	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
1,3-Dichloropropane [142-28-9] ^	0.25	U	ug/L	1	0.25	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
1,4-Dichlorobenzene [106-46-7] ^	0.23	U	ug/L	1	0.23	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
2,2-Dichloropropane [594-20-7] ^	0.40	U	ug/L	1	0.40	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
2-Butanone [78-93-3] ^	0.38	U	ug/L	1	0.38	5.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
2-Chloroethyl Vinyl Ether [110-75-8] ^	1.5	U	ug/L	1	1.5	5.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
2-Chlorotoluene [95-49-8] ^	0.33	U	ug/L	1	0.33	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
2-Hexanone [591-78-6] ^	0.50	U	ug/L	1	0.50	5.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
4-Chlorotoluene [106-43-4] ^	0.22	U	ug/L	1	0.22	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
4-Isopropyltoluene [99-87-6] ^	0.29	U	ug/L	1	0.29	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
4-Methyl-2-pentanone [108-10-1] ^	1.0	U	ug/L	1	1.0	5.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
Acetone [67-64-1] ^	1.1	U	ug/L	1	1.1	5.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
Benzene [71-43-2] ^	0.27	U	ug/L	1	0.27	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
Bromobenzene [108-86-1] ^	0.26	U	ug/L	1	0.26	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
Bromochloromethane [74-97-5] ^	0.28	U	ug/L	1	0.28	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
Bromodichloromethane [75-27-4] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
Bromoform [75-25-2] ^	0.33	U	ug/L	1	0.33	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
Bromomethane [74-83-9] ^	0.64	U	ug/L	1	0.64	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
Carbon disulfide [75-15-0] ^	0.24	U	ug/L	1	0.24	5.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
Carbon tetrachloride [56-23-5] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
Chlorobenzene [108-90-7] ^	0.24	U	ug/L	1	0.24	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
Chloroethane [75-00-3] ^	0.31	U	ug/L	1	0.31	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
Chloroform [67-66-3] ^	0.21	U	ug/L	1	0.21	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
Chloromethane [74-87-3] ^	0.31	U	ug/L	1	0.31	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
cis-1,2-Dichloroethene [156-59-2] ^	0.22	U	ug/L	1	0.22	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
cis-1,3-Dichloropropene [10061-01-5] ^	0.35	U	ug/L	1	0.35	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
Dibromochloromethane [124-48-1] ^	0.27	U	ug/L	1	0.27	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
Dichlorodifluoromethane [75-71-8] ^	0.29	U	ug/L	1	0.29	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
Ethylbenzene [100-41-4] ^	0.26	U	ug/L	1	0.26	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
Hexachlorobutadiene [87-68-3] ^	0.35	U	ug/L	1	0.35	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
Isopropylbenzene [98-82-8] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
m,p-Xylenes [108-38-3/106-42-3] ^	0.50	U	ug/L	1	0.50	2.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
Methylene chloride [75-09-2] ^	0.62	U	ug/L	1	0.62	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	

**Description:** MW-5

**Lab Sample ID:** B102269-05

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 14:55

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Volatile Organic Compounds by GCMS**
<sup>^</sup> - ENCO Jacksonville certified analyte [INC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Methyl-tert-Butyl Ether [1634-04-4] ^	0.24	U	ug/L	1	0.24	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
Naphthalene [91-20-3] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
n-Butyl Benzene [104-51-8] ^	0.28	U	ug/L	1	0.28	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
n-Propyl Benzene [103-65-1] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
o-Xylene [95-47-6] ^	0.25	U	ug/L	1	0.25	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
sec-Butylbenzene [135-98-8] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
Styrene [100-42-5] ^	0.32	U	ug/L	1	0.32	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
tert-Butylbenzene [98-06-6] ^	0.21	U	ug/L	1	0.21	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
Tetrachloroethene [127-18-4] ^	0.21	U	ug/L	1	0.21	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
Toluene [108-88-3] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
trans-1,2-Dichloroethene [156-60-5] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
trans-1,3-Dichloropropene [10061-02-6] ^	0.33	U	ug/L	1	0.33	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
Trichloroethene [79-01-6] ^	0.24	U	ug/L	1	0.24	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
Trichlorofluoromethane [75-69-4] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
Vinyl chloride [75-01-4] ^	0.33	U	ug/L	1	0.33	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
Xylenes (Total) [1330-20-7] ^	0.50	U	ug/L	1	0.50	1.0	1E26018	EPA 8260B	05/28/11 01:40	GMB	
<hr/>											
<b>Surrogates</b>	<b>Results</b>	<b>DF</b>	<b>Spike Lvl</b>	<b>% Rec</b>	<b>% Rec Limits</b>		<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
4-Bromofluorobenzene	48	1	50.0	97 %	62-132		1E26018	EPA 8260B	05/28/11 01:40	GMB	
Dibromofluoromethane	50	1	50.0	101 %	73-134		1E26018	EPA 8260B	05/28/11 01:40	GMB	
Toluene-d8	58	1	50.0	116 %	66-138		1E26018	EPA 8260B	05/28/11 01:40	GMB	

**Description:** MW-5

**Lab Sample ID:** B102269-05

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 14:55

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Non-Halogenated Volatile Organics by GC**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Ethylene Glycol [107-21-1] ^	4.1	U	mg/L	1	4.1	10	1E31002	EPA 8015C	05/31/11 13:29	LAC	
Propylene Glycol [57-55-6] ^	1.8	U	mg/L	1	1.8	10	1E31002	EPA 8015C	05/31/11 13:29	LAC	
<b>Surrogates</b>	<b>Results</b>	<b>DF</b>	<b>Spike Lvl</b>	<b>% Rec</b>	<b>% Rec Limits</b>		<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
1,3-Butylene Glycol	99	1	101	98.4 %	50-150		1E31002	EPA 8015C	05/31/11 13:29	LAC	

**Description:** MW-5

**Lab Sample ID:** B102269-05

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 14:55

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Diesel Range Organics by GC**
<sup>^</sup> - ENCO Jacksonville certified analyte [INC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
DRO (C10-C28) [ECL-0057] ^	0.039	1	mg/L	1	0.024	0.10	1E25012	EPA 8015C	05/25/11 21:52	JSW	
<b>Surrogates</b>											
<i>o-Terphenyl</i>	Results	DF	Spike Lvl	% Rec	% Rec Limits		Batch	Method	Analyzed	By	Notes
	0.052	1	0.0532	98 %	63-139		1E25012	EPA 8015C	05/25/11 21:52	JSW	

**Description:** MW-5**Matrix:** Ground Water**Project:** Cooper Tools**Lab Sample ID:** B102269-05**Sampled:** 05/24/11 14:55**Sampled By:** Danny Hefner**Received:** 05/25/11 10:15**Work Order:** B102269**Metals by EPA 6000/7000 Series Methods**

^ - ENCO Jacksonville certified analyte [NC 442]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	0.0862	IV	ug/L	1	0.0720	0.200	1E31012	EPA 7470A	06/02/11 13:15	LTS	J-01

**Description:** MW-5

**Lab Sample ID:** B102269-05

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 14:55

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Metals (total recoverable) by EPA 6000/7000 Series Methods**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>POL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Arsenic [7440-38-2] ^	6.70	U	ug/L	1	6.70	10.0	1E27012	EPA 6010C	05/31/11 12:46	ACV	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1E27012	EPA 6010C	05/31/11 12:46	ACV	
Cadmium [7440-43-9] ^	<b>0.396</b>	I	ug/L	1	0.370	1.00	1E27012	EPA 6010C	05/31/11 12:46	ACV	
Chromium [7440-47-3] ^	<b>1.64</b>	I	ug/L	1	1.30	10.0	1E27012	EPA 6010C	05/31/11 12:46	ACV	
Copper [7440-50-8] ^	1.50	U	ug/L	1	1.50	10.0	1E27012	EPA 6010C	05/31/11 12:46	ACV	
Lead [7439-92-1] ^	<b>3.37</b>	I	ug/L	1	2.90	10.0	1E27012	EPA 6010C	05/31/11 12:46	ACV	
Nickel [7440-02-0] ^	<b>2.90</b>	I	ug/L	1	1.10	10.0	1E27012	EPA 6010C	05/31/11 12:46	ACV	
Selenium [7782-49-2] ^	8.90	U	ug/L	1	8.90	10.0	1E27012	EPA 6010C	05/31/11 12:46	ACV	
Silver [7440-22-4] ^	1.50	U	ug/L	1	1.50	10.0	1E27012	EPA 6010C	05/31/11 12:46	ACV	
Zinc [7440-66-6] ^	<b>5.88</b>	I	ug/L	1	3.50	10.0	1E27012	EPA 6010C	05/31/11 12:46	ACV	

**Description:** MW-5

**Lab Sample ID:** B102269-05

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 14:55

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Classical Chemistry Parameters**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Hexavalent Chromium [1854-02-99] ^	0.004	U	mg/L	1	0.004	0.030	1E25010	SM18 3500 Cr-D	05/25/11 13:05	sma	FILT
Oil & Grease (HEM) [C-0007] ^	3.00	U	mg/L	1	3.00	5.00	1E26006	EPA 1664A	05/31/11 09:08	MJF	

**Description:** MW-5

**Lab Sample ID:** B102269-05

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 14:55

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Metals (total recoverable) by EPA 6000/7000 Series Methods**
<sup>^</sup> - ENCO Orlando certified analyte [NC 424]

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>POL</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
Antimony [7440-36-0] ^	0.950	U	ug/L	1	0.950	20.0	1E26014	EPA 6020A	05/28/11 01:19	JMA	
Thallium [7440-28-0] ^	0.410	U	ug/L	1	0.410	1.00	1E26014	EPA 6020A	05/28/11 01:19	JMA	



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**Description:** MW-5

**Matrix:** Ground Water

**Project:** Cooper Tools

**Lab Sample ID:** B102269-05

**Sampled:** 05/24/11 14:55

**Received:** 05/25/11 10:15

**Work Order:** B102269

**Sampled By:** Danny Hefner

### Gasoline Range Organics by GC

*^ - ENCO Cary certified analyte [NC 591]*

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
GRO (C6-C10) [ECL-0069] ^	0.011	U	mg/L	1	0.011	0.055	1E31012	EPA 8015C	05/31/11 17:40	bpk	
<b>Surrogates</b>											
2,5-Dibromotoluene	0.0841	1	0.100	84 %	70-130		1E31012	EPA 8015C	05/31/11 17:40	bpk	Notes

**Description:** MW-6

**Lab Sample ID:** B102269-06

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 15:29

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

### Volatile Organic Compounds by GCMS

<sup>^</sup> - ENCO Jacksonville certified analyte [INC 442]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
1,1,1-Trichloroethane [71-55-6] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.32	U	ug/L	1	0.32	1.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
1,1,2-Trichloroethane [79-00-5] ^	0.40	U	ug/L	1	0.40	1.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
<b>1,1-Dichloroethane [75-34-3] ^</b>	<b>0.92</b>	<b>I</b>	<b>ug/L</b>	<b>1</b>	<b>0.30</b>	<b>1.0</b>	<b>1E26018</b>	<b>EPA 8260B</b>	<b>05/28/11 02:15</b>	<b>GMB</b>	
<b>1,1-Dichloroethene [75-35-4] ^</b>	<b>31</b>		<b>ug/L</b>	<b>1</b>	<b>0.21</b>	<b>1.0</b>	<b>1E26018</b>	<b>EPA 8260B</b>	<b>05/28/11 02:15</b>	<b>GMB</b>	
1,1-Dichloropropene [563-58-6] ^	0.21	U	ug/L	1	0.21	1.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
1,2,3-Trichlorobenzene [87-61-6] ^	0.50	U	ug/L	1	0.50	1.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
1,2,3-Trichloropropane [96-18-4] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
1,2,4-Trichlorobenzene [120-82-1] ^	0.41	U	ug/L	1	0.41	1.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
1,2,4-Trimethylbenzene [95-63-6] ^	0.28	U	ug/L	1	0.28	1.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.60	U	ug/L	1	0.60	1.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
1,2-Dibromoethane [106-93-4] ^	0.27	U	ug/L	1	0.27	1.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
1,2-Dichlorobenzene [95-50-1] ^	0.24	U	ug/L	1	0.24	1.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
<b>1,2-Dichloroethane [107-06-2] ^</b>	<b>0.63</b>	<b>I</b>	<b>ug/L</b>	<b>1</b>	<b>0.28</b>	<b>1.0</b>	<b>1E26018</b>	<b>EPA 8260B</b>	<b>05/28/11 02:15</b>	<b>GMB</b>	
1,2-Dichloropropane [78-87-5] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
1,3,5-Trimethylbenzene [108-67-8] ^	0.26	U	ug/L	1	0.26	1.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
1,3-Dichlorobenzene [541-73-1] ^	0.27	U	ug/L	1	0.27	1.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
1,3-Dichloropropane [142-28-9] ^	0.25	U	ug/L	1	0.25	1.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
1,4-Dichlorobenzene [106-46-7] ^	0.23	U	ug/L	1	0.23	1.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
2,2-Dichloropropane [594-20-7] ^	0.40	U	ug/L	1	0.40	1.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
2-Butanone [78-93-3] ^	0.38	U	ug/L	1	0.38	5.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
2-Chloroethyl Vinyl Ether [110-75-8] ^	1.5	U	ug/L	1	1.5	5.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
2-Chlorotoluene [95-49-8] ^	0.33	U	ug/L	1	0.33	1.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
2-Hexanone [591-78-6] ^	0.50	U	ug/L	1	0.50	5.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
4-Chlorotoluene [106-43-4] ^	0.22	U	ug/L	1	0.22	1.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
4-Isopropyltoluene [99-87-6] ^	0.29	U	ug/L	1	0.29	1.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
4-Methyl-2-pentanone [108-10-1] ^	1.0	U	ug/L	1	1.0	5.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
Acetone [67-64-1] ^	1.1	U	ug/L	1	1.1	5.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
Benzene [71-43-2] ^	0.27	U	ug/L	1	0.27	1.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
Bromobenzene [108-86-1] ^	0.26	U	ug/L	1	0.26	1.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
Bromochloromethane [74-97-5] ^	0.28	U	ug/L	1	0.28	1.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
Bromodichloromethane [75-27-4] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
Bromoform [75-25-2] ^	0.33	U	ug/L	1	0.33	1.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
Bromomethane [74-83-9] ^	0.64	U	ug/L	1	0.64	1.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
Carbon disulfide [75-15-0] ^	0.24	U	ug/L	1	0.24	5.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
Carbon tetrachloride [56-23-5] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
Chlorobenzene [108-90-7] ^	0.24	U	ug/L	1	0.24	1.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
Chloroethane [75-00-3] ^	0.31	U	ug/L	1	0.31	1.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
Chloroform [67-66-3] ^	0.21	U	ug/L	1	0.21	1.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
Chloromethane [74-87-3] ^	0.31	U	ug/L	1	0.31	1.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
<b>cis-1,2-Dichloroethene [156-59-2] ^</b>	<b>3.8</b>		<b>ug/L</b>	<b>1</b>	<b>0.22</b>	<b>1.0</b>	<b>1E26018</b>	<b>EPA 8260B</b>	<b>05/28/11 02:15</b>	<b>GMB</b>	
cis-1,3-Dichloropropene [10061-01-5] ^	0.35	U	ug/L	1	0.35	1.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
Dibromochloromethane [124-48-1] ^	0.27	U	ug/L	1	0.27	1.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
Dichlorodifluoromethane [75-71-8] ^	0.29	U	ug/L	1	0.29	1.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
Ethylbenzene [100-41-4] ^	0.26	U	ug/L	1	0.26	1.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
Hexachlorobutadiene [87-68-3] ^	0.35	U	ug/L	1	0.35	1.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
Isopropylbenzene [98-82-8] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
m,p-Xylenes [108-38-3/106-42-3] ^	0.50	U	ug/L	1	0.50	2.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
Methylene chloride [75-09-2] ^	0.62	U	ug/L	1	0.62	1.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	



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**Description:** MW-6**Lab Sample ID:** B102269-06**Received:** 05/25/11 10:15**Matrix:** Ground Water**Sampled:** 05/24/11 15:29**Work Order:** B102269**Project:** Cooper Tools**Sampled By:** Danny Hefner**Volatile Organic Compounds by GCMS***^ - ENCO Jacksonville certified analyte [NC 442]*

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Methyl-tert-Butyl Ether [1634-04-4] ^	0.24	U	ug/L	1	0.24	1.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
Naphthalene [91-20-3] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
n-Butyl Benzene [104-51-8] ^	0.28	U	ug/L	1	0.28	1.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
n-Propyl Benzene [103-65-1] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
o-Xylene [95-47-6] ^	0.25	U	ug/L	1	0.25	1.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
sec-Butylbenzene [135-98-8] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
Styrene [100-42-5] ^	0.32	U	ug/L	1	0.32	1.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
tert-Butylbenzene [98-06-6] ^	0.21	U	ug/L	1	0.21	1.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
<b>Tetrachloroethene [127-18-4] ^</b>	<b>26</b>		ug/L	1	0.21	1.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
Toluene [108-88-3] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
trans-1,2-Dichloroethene [156-60-5] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
trans-1,3-Dichloropropene [10061-02-6] ^	0.33	U	ug/L	1	0.33	1.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
<b>Trichloroethene [79-01-6] ^</b>	<b>9.6</b>		ug/L	1	0.24	1.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
Trichlorofluoromethane [75-69-4] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
Vinyl chloride [75-01-4] ^	0.33	U	ug/L	1	0.33	1.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
Xylenes (Total) [1330-20-7] ^	0.50	U	ug/L	1	0.50	1.0	1E26018	EPA 8260B	05/28/11 02:15	GMB	
<b>Surrogates</b>	<b>Results</b>	<b>DF</b>	<b>Spike Lvl</b>	<b>% Rec</b>	<b>% Rec Limits</b>		<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
4-Bromofluorobenzene	49	1	50.0	99 %	62-132		1E26018	EPA 8260B	05/28/11 02:15	GMB	
Dibromofluoromethane	52	1	50.0	105 %	73-134		1E26018	EPA 8260B	05/28/11 02:15	GMB	
Toluene-d8	58	1	50.0	116 %	66-138		1E26018	EPA 8260B	05/28/11 02:15	GMB	

**Description:** MW-6

**Lab Sample ID:** B102269-06

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 15:29

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Non-Halogenated Volatile Organics by GC**
<sup>^</sup> - ENCO Jacksonville certified analyte [INC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Ethylene Glycol [107-21-1] ^	4.1	U	mg/L	1	4.1	10	1E31002	EPA 8015C	05/31/11 13:40	LAC	
Propylene Glycol [57-55-6] ^	1.8	U	mg/L	1	1.8	10	1E31002	EPA 8015C	05/31/11 13:40	LAC	
<b>Surrogates</b>	<b>Results</b>	<b>DF</b>	<b>Spike Lvl</b>	<b>% Rec</b>	<b>% Rec Limits</b>		<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
1,3-Butylene Glycol	97	1	101	95.8 %	50-150		1E31002	EPA 8015C	05/31/11 13:40	LAC	

**Description:** MW-6

**Lab Sample ID:** B102269-06

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 15:29

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

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### Diesel Range Organics by GC

^ - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
DRO (C10-C28) [ECL-0057] ^	0.13		mg/L	1	0.024	0.10	1E25012	EPA 8015C	05/25/11 22:39	JSW	
<hr/>											
<b>Surrogates</b>	<b>Results</b>	<b>DF</b>	<b>Spike Lvl</b>	<b>% Rec</b>	<b>% Rec Limits</b>		<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
<i>o-Terphenyl</i>	0.037	1	0.0538	69 %	63-139		1E25012	EPA 8015C	05/25/11 22:39	JSW	

**Description:** MW-6**Lab Sample ID:** B102269-06**Received:** 05/25/11 10:15**Matrix:** Ground Water**Sampled:** 05/24/11 15:29**Work Order:** B102269**Project:** Cooper Tools**Sampled By:** Danny Hefner**Metals by EPA 6000/7000 Series Methods***^ - ENCO Jacksonville certified analyte [NC 442]*

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	POL	Batch	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	0.848	V	ug/L	1	0.216	0.600	1E31012	EPA 7470A	06/02/11 13:20	LTS	J-01

**Description:** MW-6

**Lab Sample ID:** B102269-06

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 15:29

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Metals (total recoverable) by EPA 6000/7000 Series Methods**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>POL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Arsenic [7440-38-2] ^	663		ug/L	5	33.5	50.0	1E27012	EPA 6010C	05/31/11 12:48	ACV	
Beryllium [7440-41-7] ^	25.4		ug/L	5	0.500	5.00	1E27012	EPA 6010C	05/31/11 12:48	ACV	
Cadmium [7440-43-9] ^	2.29	I	ug/L	5	1.85	5.00	1E27012	EPA 6010C	05/31/11 12:48	ACV	
Chromium [7440-47-3] ^	186		ug/L	5	6.50	50.0	1E27012	EPA 6010C	05/31/11 12:48	ACV	
Copper [7440-50-8] ^	952		ug/L	5	7.50	50.0	1E27012	EPA 6010C	05/31/11 12:48	ACV	
Lead [7439-92-1] ^	1650		ug/L	5	14.5	50.0	1E27012	EPA 6010C	05/31/11 12:48	ACV	
Nickel [7440-02-0] ^	77.4		ug/L	5	5.50	50.0	1E27012	EPA 6010C	05/31/11 12:48	ACV	
Selenium [7782-49-2] ^	44.5	U	ug/L	5	44.5	50.0	1E27012	EPA 6010C	05/31/11 12:48	ACV	
Silver [7440-22-4] ^	7.50	U	ug/L	5	7.50	50.0	1E27012	EPA 6010C	05/31/11 12:48	ACV	
Zinc [7440-66-6] ^	176		ug/L	5	17.5	50.0	1E27012	EPA 6010C	05/31/11 12:48	ACV	

**Description:** MW-6

**Lab Sample ID:** B102269-06

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 15:29

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

### **Classical Chemistry Parameters**

*^ - ENCO Jacksonville certified analyte [NC 442]*

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Hexavalent Chromium [1854-02-99] ^	0.004	U	mg/L	1	0.004	0.030	1E25010	SM18 3500 Cr-D	05/25/11 13:05	sma	FILT
Oil & Grease (HEM) [C-0007] ^	3.00	U	mg/L	1	3.00	5.00	1E26006	EPA 1664A	05/31/11 09:08	MJF	

**Description:** MW-6

**Lab Sample ID:** B102269-06

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 15:29

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Metals (total recoverable) by EPA 6000/7000 Series Methods**
<sup>^</sup> - ENCO Orlando certified analyte [NC 424]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Antimony [7440-36-0] ^	2.38	I	ug/L	1	0.950	20.0	1E26014	EPA 6020A	05/28/11 01:26	JMA	
Thallium [7440-28-0] ^	1.30		ug/L	1	0.410	1.00	1E26014	EPA 6020A	05/28/11 01:26	JMA	

**Description:** MW-6

**Lab Sample ID:** B102269-06

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 15:29

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Gasoline Range Organics by GC**
<sup>^</sup> - ENCO Cary certified analyte [NC 591]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
GRO (C6-C10) [ECL-0069] ^	0.018	I	mg/L	1	0.011	0.055	1E31012	EPA 8015C	05/31/11 18:11	bpk	
<b>Surrogates</b>											
2,5-Dibromotoluene	0.0848	1	0.100	85 %	70-130		1E31012	EPA 8015C	05/31/11 18:11	bpk	Notes



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**Description:** MW-7**Matrix:** Ground Water**Project:** Cooper Tools**Lab Sample ID:** B102269-07**Received:** 05/25/11 10:15**Sampled:** 05/24/11 15:59**Work Order:** B102269**Sampled By:** Danny Hefner**Volatile Organic Compounds by GCMS**

^ - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>POL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
1,1,1,2-Tetrachloroethane [630-20-6] ^	1.0	U	ug/L	5	1.0	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
1,1,1-Trichloroethane [71-55-6] ^	1.0	U	ug/L	5	1.0	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
1,1,2,2-Tetrachloroethane [79-34-5] ^	1.6	U	ug/L	5	1.6	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
1,1,2-Trichloroethane [79-00-5] ^	2.0	U	ug/L	5	2.0	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
1,1-Dichloroethane [75-34-3] ^	1.5	U	ug/L	5	1.5	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
<b>1,1-Dichloroethene [75-35-4] ^</b>	<b>18</b>		ug/L	5	1.0	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
1,1-Dichloropropene [563-58-6] ^	1.0	U	ug/L	5	1.0	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
1,2,3-Trichlorobenzene [87-61-6] ^	2.5	U	ug/L	5	2.5	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
1,2,3-Trichloropropane [96-18-4] ^	1.5	U	ug/L	5	1.5	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
1,2,4-Trichlorobenzene [120-82-1] ^	2.0	U	ug/L	5	2.0	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
1,2,4-Trimethylbenzene [95-63-6] ^	1.4	U	ug/L	5	1.4	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
1,2-Dibromo-3-chloropropane [96-12-8] ^	3.0	U	ug/L	5	3.0	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
1,2-Dibromoethane [106-93-4] ^	1.4	U	ug/L	5	1.4	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
1,2-Dichlorobenzene [95-50-1] ^	1.2	U	ug/L	5	1.2	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
1,2-Dichloroethane [107-06-2] ^	1.4	U	ug/L	5	1.4	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
1,2-Dichloropropane [78-87-5] ^	1.5	U	ug/L	5	1.5	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
1,3,5-Trimethylbenzene [108-67-8] ^	1.3	U	ug/L	5	1.3	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
1,3-Dichlorobenzene [541-73-1] ^	1.4	U	ug/L	5	1.4	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
1,3-Dichloropropane [142-28-9] ^	1.2	U	ug/L	5	1.2	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
1,4-Dichlorobenzene [106-46-7] ^	1.2	U	ug/L	5	1.2	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
2,2-Dichloropropane [594-20-7] ^	2.0	U	ug/L	5	2.0	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
2-Butanone [78-93-3] ^	1.9	U	ug/L	5	1.9	25	1E26018	EPA 8260B	05/28/11 03:24	GMB	
2-Chloroethyl Vinyl Ether [110-75-8] ^	7.5	U	ug/L	5	7.5	25	1E26018	EPA 8260B	05/28/11 03:24	GMB	
2-Chlorotoluene [95-49-8] ^	1.6	U	ug/L	5	1.6	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
2-Hexanone [591-78-6] ^	2.5	U	ug/L	5	2.5	25	1E26018	EPA 8260B	05/28/11 03:24	GMB	
4-Chlorotoluene [106-43-4] ^	1.1	U	ug/L	5	1.1	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
4-Isopropyltoluene [99-87-6] ^	1.4	U	ug/L	5	1.4	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
4-Methyl-2-pentanone [108-10-1] ^	5.0	U	ug/L	5	5.0	25	1E26018	EPA 8260B	05/28/11 03:24	GMB	
Acetone [67-64-1] ^	5.5	U	ug/L	5	5.5	25	1E26018	EPA 8260B	05/28/11 03:24	GMB	
Benzene [71-43-2] ^	1.4	U	ug/L	5	1.4	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
Bromobenzene [108-86-1] ^	1.3	U	ug/L	5	1.3	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
Bromochloromethane [74-97-5] ^	1.4	U	ug/L	5	1.4	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
Bromodichloromethane [75-27-4] ^	1.0	U	ug/L	5	1.0	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
Bromoform [75-25-2] ^	1.6	U	ug/L	5	1.6	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
Bromomethane [74-83-9] ^	3.2	U	ug/L	5	3.2	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
Carbon disulfide [75-15-0] ^	1.2	U	ug/L	5	1.2	25	1E26018	EPA 8260B	05/28/11 03:24	GMB	
Carbon tetrachloride [56-23-5] ^	1.0	U	ug/L	5	1.0	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
Chlorobenzene [108-90-7] ^	1.2	U	ug/L	5	1.2	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
Chloroethane [75-00-3] ^	1.6	U	ug/L	5	1.6	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
Chloroform [67-66-3] ^	1.0	U	ug/L	5	1.0	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
Chloromethane [74-87-3] ^	1.6	U	ug/L	5	1.6	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
cis-1,2-Dichloroethene [156-59-2] ^	1.1	U	ug/L	5	1.1	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
cis-1,3-Dichloropropene [10061-01-5] ^	1.8	U	ug/L	5	1.8	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
Dibromochloromethane [124-48-1] ^	1.4	U	ug/L	5	1.4	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
Dibromomethane [74-95-3] ^	1.4	U	ug/L	5	1.4	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
Dichlorodifluoromethane [75-71-8] ^	1.4	U	ug/L	5	1.4	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
Ethylbenzene [100-41-4] ^	1.3	U	ug/L	5	1.3	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
Hexachlorobutadiene [87-68-3] ^	1.8	U	ug/L	5	1.8	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
Isopropylbenzene [98-82-8] ^	1.0	U	ug/L	5	1.0	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
m,p-Xylenes [108-38-3/106-42-3] ^	2.5	U	ug/L	5	2.5	10	1E26018	EPA 8260B	05/28/11 03:24	GMB	
Methylene chloride [75-09-2] ^	3.1	U	ug/L	5	3.1	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	

**Description:** MW-7

**Lab Sample ID:** B102269-07

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 15:59

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Volatile Organic Compounds by GCMS**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Methyl-tert-Butyl Ether [1634-04-4] ^	1.2	U	ug/L	5	1.2	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
Naphthalene [91-20-3] ^	1.5	U	ug/L	5	1.5	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
n-Butyl Benzene [104-51-8] ^	1.4	U	ug/L	5	1.4	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
n-Propyl Benzene [103-65-1] ^	1.0	U	ug/L	5	1.0	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
o-Xylene [95-47-6] ^	1.2	U	ug/L	5	1.2	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
sec-Butylbenzene [135-98-8] ^	1.0	U	ug/L	5	1.0	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
Styrene [100-42-5] ^	1.6	U	ug/L	5	1.6	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
tert-Butylbenzene [98-06-6] ^	1.0	U	ug/L	5	1.0	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
<b>Tetrachloroethene [127-18-4] ^</b>	<b>160</b>		ug/L	<b>5</b>	<b>1.0</b>	<b>5.0</b>	<b>1E26018</b>	<b>EPA 8260B</b>	<b>05/28/11 03:24</b>	<b>GMB</b>	
Toluene [108-88-3] ^	1.5	U	ug/L	5	1.5	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
trans-1,2-Dichloroethene [156-60-5] ^	1.5	U	ug/L	5	1.5	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
trans-1,3-Dichloropropene [10061-02-6] ^	1.6	U	ug/L	5	1.6	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
<b>Trichloroethene [79-01-6] ^</b>	<b>1.2</b>	<b>I</b>	ug/L	<b>5</b>	<b>1.2</b>	<b>5.0</b>	<b>1E26018</b>	<b>EPA 8260B</b>	<b>05/28/11 03:24</b>	<b>GMB</b>	
Trichlorofluoromethane [75-69-4] ^	1.0	U	ug/L	5	1.0	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
Vinyl chloride [75-01-4] ^	1.6	U	ug/L	5	1.6	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
Xylenes (Total) [1330-20-7] ^	2.5	U	ug/L	5	2.5	5.0	1E26018	EPA 8260B	05/28/11 03:24	GMB	
<hr/>											
<b>Surrogates</b>	<b>Results</b>	<b>DF</b>	<b>Spike Lvl</b>	<b>% Rec</b>	<b>% Rec Limits</b>		<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
4-Bromofluorobenzene	49	1	50.0	97 %	62-132		1E26018	EPA 8260B	05/28/11 03:24	GMB	
Dibromofluoromethane	54	1	50.0	108 %	73-134		1E26018	EPA 8260B	05/28/11 03:24	GMB	
Toluene-d8	58	1	50.0	116 %	66-138		1E26018	EPA 8260B	05/28/11 03:24	GMB	

**Description:** MW-7

**Lab Sample ID:** B102269-07

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 15:59

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Non-Halogenated Volatile Organics by GC**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Ethylene Glycol [107-21-1] ^	4.1	U	mg/L	1	4.1	10	1E31002	EPA 8015C	05/31/11 13:51	LAC	
Propylene Glycol [57-55-6] ^	1.8	U	mg/L	1	1.8	10	1E31002	EPA 8015C	05/31/11 13:51	LAC	
<b>Surrogates</b>	<b>Results</b>	<b>DF</b>	<b>Spike Lvl</b>	<b>% Rec</b>	<b>% Rec Limits</b>		<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
1,3-Butylene Glycol	100	1	101	99.2 %	50-150		1E31002	EPA 8015C	05/31/11 13:51	LAC	

**Description:** MW-7

**Lab Sample ID:** B102269-07

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 15:59

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Diesel Range Organics by GC**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>POL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
DRO (C10-C28) [ECL-0057] ^	0.028	I	mg/L	1	0.024	0.10	1E25012	EPA 8015C	05/25/11 23:02	JSW	
<b>Surrogates</b>											
<i>o-Terphenyl</i>	Results	DF	Spike Lvl	% Rec	% Rec Limits		Batch	Method	Analyzed	By	Notes
	0.053	1	0.0543	98 %	63-139		1E25012	EPA 8015C	05/25/11 23:02	JSW	

**Description:** MW-7**Matrix:** Ground Water**Project:** Cooper Tools**Lab Sample ID:** B102269-07**Sampled:** 05/24/11 15:59**Sampled By:** Danny Hefner**Received:** 05/25/11 10:15**Work Order:** B102269**Metals by EPA 6000/7000 Series Methods**

^ - ENCO Jacksonville certified analyte [NC 442]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	POL	Batch	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	0.0849	IV	ug/L	1	0.0720	0.200	1E31012	EPA 7470A	06/02/11 13:22	LTS	J-01

**Description:** MW-7

**Lab Sample ID:** B102269-07

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 15:59

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Metals (total recoverable) by EPA 6000/7000 Series Methods**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Arsenic [7440-38-2] ^	11.8		ug/L	1	6.70	10.0	1E27012	EPA 6010C	05/31/11 12:50	ACV	
Beryllium [7440-41-7] ^	0.391	I	ug/L	1	0.100	1.00	1E27012	EPA 6010C	05/31/11 12:50	ACV	
Cadmium [7440-43-9] ^	0.370	U	ug/L	1	0.370	1.00	1E27012	EPA 6010C	05/31/11 12:50	ACV	
Chromium [7440-47-3] ^	14.8		ug/L	1	1.30	10.0	1E27012	EPA 6010C	05/31/11 12:50	ACV	
Copper [7440-50-8] ^	12.0		ug/L	1	1.50	10.0	1E27012	EPA 6010C	05/31/11 12:50	ACV	
Lead [7439-92-1] ^	9.35	I	ug/L	1	2.90	10.0	1E27012	EPA 6010C	05/31/11 12:50	ACV	
Nickel [7440-02-0] ^	9.59	I	ug/L	1	1.10	10.0	1E27012	EPA 6010C	05/31/11 12:50	ACV	
Selenium [7782-49-2] ^	8.90	U	ug/L	1	8.90	10.0	1E27012	EPA 6010C	05/31/11 12:50	ACV	
Silver [7440-22-4] ^	1.50	U	ug/L	1	1.50	10.0	1E27012	EPA 6010C	05/31/11 12:50	ACV	
Zinc [7440-66-6] ^	22.9		ug/L	1	3.50	10.0	1E27012	EPA 6010C	05/31/11 12:50	ACV	

**Description:** MW-7

**Lab Sample ID:** B102269-07

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 15:59

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

### **Classical Chemistry Parameters**

<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Hexavalent Chromium [1854-02-99] ^	0.004	U	mg/L	1	0.004	0.030	1E25010	SM18 3500 Cr-D	05/25/11 13:05	sma	FILT
Oil & Grease (HEM) [C-0007] ^	3.00	U	mg/L	1	3.00	5.00	1E26006	EPA 1664A	05/31/11 09:08	MJF	

**Description:** MW-7

**Lab Sample ID:** B102269-07

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 15:59

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Metals (total recoverable) by EPA 6000/7000 Series Methods**
<sup>^</sup> - ENCO Orlando certified analyte [NC 424]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Antimony [7440-36-0] ^	0.950	U	ug/L	1	0.950	20.0	1E26014	EPA 6020A	05/28/11 01:36	JMA	
Thallium [7440-28-0] ^	0.410	U	ug/L	1	0.410	1.00	1E26014	EPA 6020A	05/28/11 01:36	JMA	

**Description:** MW-7

**Matrix:** Ground Water

**Project:** Cooper Tools

**Lab Sample ID:** B102269-07

**Received:** 05/25/11 10:15

**Sampled:** 05/24/11 15:59

**Work Order:** B102269

**Sampled By:** Danny Hefner

**Gasoline Range Organics by GC**
<sup>^</sup> - ENCO Cary certified analyte [NC 591]

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
GRO (C6-C10) [ECL-0069] ^	0.063		mg/L	1	0.011	0.055	1E31012	EPA 8015C	05/31/11 18:43	bpk	
<i>Surrogates</i>											
2,5-Dibromotoluene	0.0857	1	0.100	86 %	70-130		1E31012	EPA 8015C	05/31/11 18:43	bpk	Notes

**Description:** MW-8

**Lab Sample ID:** B102269-08

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 14:40

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Volatile Organic Compounds by GCMS**
<sup>^</sup> - ENCO Jacksonville certified analyte [INC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>POL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
1,1,1,2-Tetrachloroethane [630-20-6] ^	10	U	ug/L	50	10	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
1,1,1-Trichloroethane [71-55-6] ^	10	U	ug/L	50	10	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
1,1,2,2-Tetrachloroethane [79-34-5] ^	16	U	ug/L	50	16	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
1,1,2-Trichloroethane [79-00-5] ^	20	U	ug/L	50	20	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
1,1-Dichloroethane [75-34-3] ^	15	U	ug/L	50	15	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
<b>1,1-Dichloroethene [75-35-4] ^</b>	<b>88</b>		ug/L	50	10	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
1,1-Dichloropropene [563-58-6] ^	10	U	ug/L	50	10	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
1,2,3-Trichlorobenzene [87-61-6] ^	25	U	ug/L	50	25	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
1,2,3-Trichloropropane [96-18-4] ^	15	U	ug/L	50	15	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
1,2,4-Trichlorobenzene [120-82-1] ^	20	U	ug/L	50	20	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
1,2,4-Trimethylbenzene [95-63-6] ^	14	U	ug/L	50	14	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
1,2-Dibromo-3-chloropropane [96-12-8] ^	30	U	ug/L	50	30	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
1,2-Dibromoethane [106-93-4] ^	14	U	ug/L	50	14	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
1,2-Dichlorobenzene [95-50-1] ^	12	U	ug/L	50	12	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
1,2-Dichloroethane [107-06-2] ^	14	U	ug/L	50	14	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
1,2-Dichloropropane [78-87-5] ^	15	U	ug/L	50	15	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
1,3,5-Trimethylbenzene [108-67-8] ^	13	U	ug/L	50	13	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
1,3-Dichlorobenzene [541-73-1] ^	14	U	ug/L	50	14	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
1,3-Dichloropropane [142-28-9] ^	12	U	ug/L	50	12	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
1,4-Dichlorobenzene [106-46-7] ^	12	U	ug/L	50	12	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
2,2-Dichloropropane [594-20-7] ^	20	U	ug/L	50	20	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
2-Butanone [78-93-3] ^	19	U	ug/L	50	19	250	1E31015	EPA 8260B	05/31/11 18:19	GMB	
2-Chloroethyl Vinyl Ether [110-75-8] ^	75	U	ug/L	50	75	250	1E31015	EPA 8260B	05/31/11 18:19	GMB	
2-Chlorotoluene [95-49-8] ^	16	U	ug/L	50	16	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
2-Hexanone [591-78-6] ^	25	U	ug/L	50	25	250	1E31015	EPA 8260B	05/31/11 18:19	GMB	
4-Chlorotoluene [106-43-4] ^	11	U	ug/L	50	11	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
4-Isopropyltoluene [99-87-6] ^	14	U	ug/L	50	14	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
4-Methyl-2-pentanone [108-10-1] ^	50	U	ug/L	50	50	250	1E31015	EPA 8260B	05/31/11 18:19	GMB	
Acetone [67-64-1] ^	55	U	ug/L	50	55	250	1E31015	EPA 8260B	05/31/11 18:19	GMB	
Benzene [71-43-2] ^	14	U	ug/L	50	14	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
Bromobenzene [108-88-1] ^	13	U	ug/L	50	13	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
Bromochloromethane [74-97-5] ^	14	U	ug/L	50	14	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
Bromodichloromethane [75-27-4] ^	10	U	ug/L	50	10	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
Bromoform [75-25-2] ^	16	U	ug/L	50	16	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
Bromomethane [74-83-9] ^	32	U	ug/L	50	32	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
Carbon disulfide [75-15-0] ^	12	U	ug/L	50	12	250	1E31015	EPA 8260B	05/31/11 18:19	GMB	
Carbon tetrachloride [56-23-5] ^	10	U	ug/L	50	10	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
Chlorobenzene [108-90-7] ^	12	U	ug/L	50	12	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
Chloroethane [75-00-3] ^	16	U	ug/L	50	16	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
Chloroform [67-66-3] ^	10	U	ug/L	50	10	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
Chloromethane [74-87-3] ^	16	U	ug/L	50	16	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
<b>cis-1,2-Dichloroethene [156-59-2] ^</b>	<b>78</b>		ug/L	50	11	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
cis-1,3-Dichloropropene [10061-01-5] ^	18	U	ug/L	50	18	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
Dibromochloromethane [124-48-1] ^	14	U	ug/L	50	14	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
Dibromomethane [74-95-3] ^	14	U	ug/L	50	14	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
Dichlorodifluoromethane [75-71-8] ^	14	U	ug/L	50	14	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
Ethylbenzene [100-41-4] ^	13	U	ug/L	50	13	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
Hexachlorobutadiene [87-68-3] ^	18	U	ug/L	50	18	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
Isopropylbenzene [98-82-8] ^	10	U	ug/L	50	10	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
m,p-Xylenes [108-38-3/106-42-3] ^	25	U	ug/L	50	25	100	1E31015	EPA 8260B	05/31/11 18:19	GMB	
Methylene chloride [75-09-2] ^	31	U	ug/L	50	31	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	



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**Description:** MW-8**Lab Sample ID:** B102269-08**Received:** 05/25/11 10:15**Matrix:** Ground Water**Sampled:** 05/24/11 14:40**Work Order:** B102269**Project:** Cooper Tools**Sampled By:** Danny Hefner**Volatile Organic Compounds by GCMS***^ - ENCO Jacksonville certified analyte [NC 442]*

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Methyl-tert-Butyl Ether [1634-04-4] ^	12	U	ug/L	50	12	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
Naphthalene [91-20-3] ^	15	U	ug/L	50	15	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
n-Butyl Benzene [104-51-8] ^	14	U	ug/L	50	14	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
n-Propyl Benzene [103-65-1] ^	10	U	ug/L	50	10	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
o-Xylene [95-47-6] ^	12	U	ug/L	50	12	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
sec-Butylbenzene [135-98-8] ^	10	U	ug/L	50	10	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
Styrene [100-42-5] ^	16	U	ug/L	50	16	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
tert-Butylbenzene [98-06-6] ^	10	U	ug/L	50	10	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
<b>Tetrachloroethene [127-18-4] ^</b>	<b>2700</b>		ug/L	50	10	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
Toluene [108-88-3] ^	15	U	ug/L	50	15	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
trans-1,2-Dichloroethene [156-60-5] ^	15	U	ug/L	50	15	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
trans-1,3-Dichloropropene [10061-02-6] ^	16	U	ug/L	50	16	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
<b>Trichloroethene [79-01-6] ^</b>	<b>86</b>		ug/L	50	12	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
Trichlorofluoromethane [75-69-4] ^	10	U	ug/L	50	10	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
Vinyl chloride [75-01-4] ^	16	U	ug/L	50	16	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
Xylenes (Total) [1330-20-7] ^	25	U	ug/L	50	25	50	1E31015	EPA 8260B	05/31/11 18:19	GMB	
<b>Surrogates</b>	<b>Results</b>	<b>DF</b>	<b>Spike Lvl</b>	<b>% Rec</b>	<b>% Rec Limits</b>		<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
4-Bromofluorobenzene	50	1	50.0	100 %	62-132		1E31015	EPA 8260B	05/31/11 18:19	GMB	
Dibromofluoromethane	54	1	50.0	109 %	73-134		1E31015	EPA 8260B	05/31/11 18:19	GMB	
Toluene-d8	57	1	50.0	114 %	66-138		1E31015	EPA 8260B	05/31/11 18:19	GMB	

**Description:** MW-8

**Lab Sample ID:** B102269-08

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 14:40

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Non-Halogenated Volatile Organics by GC**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Ethylene Glycol [107-21-1] ^	4.1	U	mg/L	1	4.1	10	1E31002	EPA 8015C	05/31/11 14:02	LAC	
Propylene Glycol [57-55-6] ^	1.8	U	mg/L	1	1.8	10	1E31002	EPA 8015C	05/31/11 14:02	LAC	
<b>Surrogates</b>	<b>Results</b>	<b>DF</b>	<b>Spike Lvl</b>	<b>% Rec</b>	<b>% Rec Limits</b>		<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
1,3-Butylene Glycol	99	1	101	97.6 %	50-150		1E31002	EPA 8015C	05/31/11 14:02	LAC	

**Description:** MW-8

**Matrix:** Ground Water

**Project:** Cooper Tools

**Lab Sample ID:** B102269-08

**Sampled:** 05/24/11 14:40

**Received:** 05/25/11 10:15

**Work Order:** B102269

**Diesel Range Organics by GC**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
DRO (C10-C28) [ECL-0057] ^	0.024	U	mg/L	1	0.024	0.10	1E25012	EPA 8015C	05/25/11 23:26	JSW	
<b>Surrogates</b>											
<i>o-Terphenyl</i>	<b>Results</b>	<b>DF</b>	<b>Spike Lvl</b>	<b>% Rec</b>	<b>% Rec Limits</b>		<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
	0.055	1	0.0515	106 %	63-139		1E25012	EPA 8015C	05/25/11 23:26	JSW	

**Description:** MW-8**Lab Sample ID:** B102269-08**Received:** 05/25/11 10:15**Matrix:** Ground Water**Sampled:** 05/24/11 14:40**Work Order:** B102269**Project:** Cooper Tools**Sampled By:** Danny Hefner**Metals by EPA 6000/7000 Series Methods**

^ - ENCO Jacksonville certified analyte [NC 442]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	0.327	IV	ug/L	1	0.216	0.600	1E31012	EPA 7470A	06/02/11 13:24	LTS	J-01

**Description:** MW-8

**Matrix:** Ground Water

**Project:** Cooper Tools

**Lab Sample ID:** B102269-08

**Sampled:** 05/24/11 14:40

**Sampled By:** Danny Hefner

**Received:** 05/25/11 10:15

**Work Order:** B102269

**Metals (total recoverable) by EPA 6000/7000 Series Methods**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
Arsenic [7440-38-2] ^	13.0		ug/L	1	6.70	10.0	1E27012	EPA 6010C	05/31/11 12:52	ACV	
Beryllium [7440-41-7] ^	0.498	I	ug/L	1	0.100	1.00	1E27012	EPA 6010C	05/31/11 12:52	ACV	
Cadmium [7440-43-9] ^	1.05		ug/L	1	0.370	1.00	1E27012	EPA 6010C	05/31/11 12:52	ACV	
Chromium [7440-47-3] ^	18.0		ug/L	1	1.30	10.0	1E27012	EPA 6010C	05/31/11 12:52	ACV	
Copper [7440-50-8] ^	21.3		ug/L	1	1.50	10.0	1E27012	EPA 6010C	05/31/11 12:52	ACV	
Lead [7439-92-1] ^	18.7		ug/L	1	2.90	10.0	1E27012	EPA 6010C	05/31/11 12:52	ACV	
Nickel [7440-02-0] ^	20.9		ug/L	1	1.10	10.0	1E27012	EPA 6010C	05/31/11 12:52	ACV	
Selenium [7782-49-2] ^	8.90	U	ug/L	1	8.90	10.0	1E27012	EPA 6010C	05/31/11 12:52	ACV	
Silver [7440-22-4] ^	1.50	U	ug/L	1	1.50	10.0	1E27012	EPA 6010C	05/31/11 12:52	ACV	
Zinc [7440-66-6] ^	50.9		ug/L	1	3.50	10.0	1E27012	EPA 6010C	05/31/11 12:52	ACV	

**Description:** MW-8

**Lab Sample ID:** B102269-08

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 14:40

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Classical Chemistry Parameters**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Hexavalent Chromium [1854-02-99] ^	0.004	U	mg/L	1	0.004	0.030	1E25010	SM18 3500 Cr-D	05/25/11 13:05	sma	FILT
Oil & Grease (HEM) [C-0007] ^	3.00	U	mg/L	1	3.00	5.00	1E26006	EPA 1664A	05/31/11 09:08	MJF	

**Description:** MW-8

**Lab Sample ID:** B102269-08

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 14:40

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Metals (total recoverable) by EPA 6000/7000 Series Methods**
*^ - ENCO Orlando certified analyte [NC 424]*

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>POL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Antimony [7440-36-0] ^	0.950	U	ug/L	1	0.950	20.0	1E26014	EPA 6020A	05/28/11 01:43	JMA	
Thallium [7440-28-0] ^	0.410	U	ug/L	1	0.410	1.00	1E26014	EPA 6020A	05/28/11 01:43	JMA	

**Description:** MW-8

**Lab Sample ID:** B102269-08

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 14:40

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Gasoline Range Organics by GC**
<sup>^</sup> - ENCO Cary certified analyte [INC 591]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>POL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
GRO (C6-C10) [ECL-0069] ^	1.04		mg/L	1	0.011	0.055	1E31012	EPA 8015C	05/31/11 19:14	bpk	
<b>Surrogates</b>											
2,5-Dibromotoluene	0.0831	1	0.100	83 %	70-130		1E31012	EPA 8015C	05/31/11 19:14	bpk	Notes

**Description:** MW-8D

**Lab Sample ID:** B102269-09

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 15:00

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Volatile Organic Compounds by GCMS**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
1,1,1,2-Tetrachloroethane [630-20-6] ^	10	U	ug/L	50	10	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
1,1,1-Trichloroethane [71-55-6] ^	10	U	ug/L	50	10	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
1,1,2,2-Tetrachloroethane [79-34-5] ^	16	U	ug/L	50	16	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
1,1,2-Trichloroethane [79-00-5] ^	20	U	ug/L	50	20	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
1,1-Dichloroethane [75-34-3] ^	15	U	ug/L	50	15	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
1,1-Dichloroethene [75-35-4] ^	10	U	ug/L	50	10	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
1,1-Dichloropropene [563-58-6] ^	10	U	ug/L	50	10	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
1,2,3-Trichlorobenzene [87-61-6] ^	25	U	ug/L	50	25	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
1,2,3-Trichloropropane [96-18-4] ^	15	U	ug/L	50	15	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
1,2,4-Trichlorobenzene [120-82-1] ^	20	U	ug/L	50	20	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
1,2,4-Trimethylbenzene [95-63-6] ^	14	U	ug/L	50	14	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
1,2-Dibromo-3-chloropropane [96-12-8] ^	30	U	ug/L	50	30	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
1,2-Dibromoethane [106-93-4] ^	14	U	ug/L	50	14	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
1,2-Dichlorobenzene [95-50-1] ^	12	U	ug/L	50	12	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
1,2-Dichloroethane [107-06-2] ^	14	U	ug/L	50	14	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
1,2-Dichloropropane [78-87-5] ^	15	U	ug/L	50	15	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
1,3,5-Trimethylbenzene [108-67-8] ^	13	U	ug/L	50	13	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
1,3-Dichlorobenzene [541-73-1] ^	14	U	ug/L	50	14	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
1,3-Dichloropropane [142-28-9] ^	12	U	ug/L	50	12	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
1,4-Dichlorobenzene [106-46-7] ^	12	U	ug/L	50	12	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
2,2-Dichloropropane [594-20-7] ^	20	U	ug/L	50	20	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
2-Butanone [78-93-3] ^	19	U	ug/L	50	19	250	1E31015	EPA 8260B	05/31/11 18:54	GMB	
2-Chloroethyl Vinyl Ether [110-75-8] ^	75	U	ug/L	50	75	250	1E31015	EPA 8260B	05/31/11 18:54	GMB	
2-Chlorotoluene [95-49-8] ^	16	U	ug/L	50	16	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
2-Hexanone [591-78-6] ^	25	U	ug/L	50	25	250	1E31015	EPA 8260B	05/31/11 18:54	GMB	
4-Chlorotoluene [106-43-4] ^	11	U	ug/L	50	11	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
4-Isopropyltoluene [99-87-6] ^	14	U	ug/L	50	14	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
4-Methyl-2-pentanone [108-10-1] ^	50	U	ug/L	50	50	250	1E31015	EPA 8260B	05/31/11 18:54	GMB	
Acetone [67-64-1] ^	55	U	ug/L	50	55	250	1E31015	EPA 8260B	05/31/11 18:54	GMB	
Benzene [71-43-2] ^	14	U	ug/L	50	14	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
Bromobenzene [108-86-1] ^	13	U	ug/L	50	13	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
Bromochloromethane [74-97-5] ^	14	U	ug/L	50	14	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
Bromodichloromethane [75-27-4] ^	10	U	ug/L	50	10	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
Bromoform [75-25-2] ^	16	U	ug/L	50	16	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
Bromomethane [74-83-9] ^	32	U	ug/L	50	32	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
Carbon disulfide [75-15-0] ^	12	U	ug/L	50	12	250	1E31015	EPA 8260B	05/31/11 18:54	GMB	
Carbon tetrachloride [56-23-5] ^	10	U	ug/L	50	10	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
Chlorobenzene [108-90-7] ^	12	U	ug/L	50	12	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
Chloroethane [75-00-3] ^	16	U	ug/L	50	16	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
Chloroform [67-66-3] ^	10	U	ug/L	50	10	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
Chloromethane [74-87-3] ^	16	U	ug/L	50	16	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
cis-1,2-Dichloroethene [156-59-2] ^	68	ug/L	50	11	50	1E31015	EPA 8260B	05/31/11 18:54	GMB		
cis-1,3-Dichloropropene [10061-01-5] ^	18	U	ug/L	50	18	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
Dibromochloromethane [124-48-1] ^	14	U	ug/L	50	14	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
Dibromomethane [74-95-3] ^	14	U	ug/L	50	14	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
Dichlorodifluoromethane [75-71-8] ^	14	U	ug/L	50	14	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
Ethylbenzene [100-41-4] ^	13	U	ug/L	50	13	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
Hexachlorobutadiene [87-68-3] ^	18	U	ug/L	50	18	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
Isopropylbenzene [98-82-8] ^	10	U	ug/L	50	10	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
m,p-Xylenes [108-38-3/106-42-3] ^	25	U	ug/L	50	25	100	1E31015	EPA 8260B	05/31/11 18:54	GMB	
Methylene chloride [75-09-2] ^	31	U	ug/L	50	31	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	

**Description:** MW-8D

**Lab Sample ID:** B102269-09

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 15:00

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Volatile Organic Compounds by GCMS**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Methyl-tert-Butyl Ether [1634-04-4] ^	12	U	ug/L	50	12	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
Naphthalene [91-20-3] ^	15	U	ug/L	50	15	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
n-Butyl Benzene [104-51-8] ^	14	U	ug/L	50	14	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
n-Propyl Benzene [103-65-1] ^	10	U	ug/L	50	10	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
o-Xylene [95-47-6] ^	12	U	ug/L	50	12	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
sec-Butylbenzene [135-98-8] ^	10	U	ug/L	50	10	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
Styrene [100-42-5] ^	16	U	ug/L	50	16	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
tert-Butylbenzene [98-06-6] ^	10	U	ug/L	50	10	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
<b>Tetrachloroethene [127-18-4] ^</b>	<b>3300</b>		ug/L	50	10	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
Toluene [108-88-3] ^	15	U	ug/L	50	15	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
trans-1,2-Dichloroethene [156-60-5] ^	15	U	ug/L	50	15	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
trans-1,3-Dichloropropene [10061-02-6] ^	16	U	ug/L	50	16	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
<b>Trichloroethene [79-01-6] ^</b>	<b>84</b>		ug/L	50	12	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
Trichlorofluoromethane [75-69-4] ^	10	U	ug/L	50	10	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
Vinyl chloride [75-01-4] ^	16	U	ug/L	50	16	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
Xlenes (Total) [1330-20-7] ^	25	U	ug/L	50	25	50	1E31015	EPA 8260B	05/31/11 18:54	GMB	
<b>Surrogates</b>											
4-Bromofluorobenzene	50	I	50.0	100 %	62-132		1E31015	EPA 8260B	05/31/11 18:54	GMB	
Dibromofluoromethane	53	I	50.0	105 %	73-134		1E31015	EPA 8260B	05/31/11 18:54	GMB	
Toluene-d8	58	I	50.0	117 %	66-138		1E31015	EPA 8260B	05/31/11 18:54	GMB	

**Description:** MW-8D

**Lab Sample ID:** B102269-09

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 15:00

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Non-Halogenated Volatile Organics by GC**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>POL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Ethylene Glycol [107-21-1] ^	4.1	U	mg/L	1	4.1	10	1E31002	EPA 8015C	05/31/11 14:13	LAC	
Propylene Glycol [57-55-6] ^	1.8	U	mg/L	1	1.8	10	1E31002	EPA 8015C	05/31/11 14:13	LAC	

**Surrogates**

<b>1,3-Butylene Glycol</b>	<b>Results</b>	<b>DF</b>	<b>Spike Lvl</b>	<b>% Rec</b>	<b>% Rec Limits</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
	95	1	101	94.5 %	50-150	1E31002	EPA 8015C	05/31/11 14:13	LAC	

**Description:** MW-8D

**Lab Sample ID:** B102269-09

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 15:00

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Diesel Range Organics by GC**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
DRO (C10-C28) [ECL-0057] ^	0.035	I	mg/L	1	0.024	0.10	1E25012	EPA 8015C	05/25/11 23:49	JSW	
<b>Surrogates</b>	<b>Results</b>	<b>DF</b>	<b>Spike Lvl</b>	<b>% Rec</b>	<b>% Rec Limits</b>		<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
<i>o-Terphenyl</i>	0.055	I	0.0510	108 %	63-139		1E25012	EPA 8015C	05/25/11 23:49	JSW	

**Description:** MW-8D  
**Matrix:** Ground Water  
**Project:** Cooper Tools

**Lab Sample ID:** B102269-09  
**Sampled:** 05/24/11 15:00  
**Sampled By:** Danny Hefner

**Received:** 05/25/11 10:15  
**Work Order:** B102269

### Metals by EPA 6000/7000 Series Methods

*^ - ENCO Jacksonville certified analyte [NC 442]*

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Mercury [7439-97-6] ^	0.346	IV	ug/L	1	0.216	0.600	1E31012	EPA 7470A	06/02/11 13:25	LTS	J-01

**Description:** MW-8D

**Lab Sample ID:** B102269-09

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 15:00

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Metals (total recoverable) by EPA 6000/7000 Series Methods**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Arsenic [7440-38-2] ^	10.7		ug/L	1	6.70	10.0	1E27012	EPA 6010C	05/31/11 12:54	ACV	
Beryllium [7440-41-7] ^	0.398	I	ug/L	1	0.100	1.00	1E27012	EPA 6010C	05/31/11 12:54	ACV	
Cadmium [7440-43-9] ^	0.518	I	ug/L	1	0.370	1.00	1E27012	EPA 6010C	05/31/11 12:54	ACV	
Chromium [7440-47-3] ^	13.4		ug/L	1	1.30	10.0	1E27012	EPA 6010C	05/31/11 12:54	ACV	
Copper [7440-50-8] ^	15.7		ug/L	1	1.50	10.0	1E27012	EPA 6010C	05/31/11 12:54	ACV	
Lead [7439-92-1] ^	14.4		ug/L	1	2.90	10.0	1E27012	EPA 6010C	05/31/11 12:54	ACV	
Nickel [7440-02-0] ^	16.3		ug/L	1	1.10	10.0	1E27012	EPA 6010C	05/31/11 12:54	ACV	
Selenium [7782-49-2] ^	8.90	U	ug/L	1	8.90	10.0	1E27012	EPA 6010C	05/31/11 12:54	ACV	
Silver [7440-22-4] ^	1.50	U	ug/L	1	1.50	10.0	1E27012	EPA 6010C	05/31/11 12:54	ACV	
Zinc [7440-66-6] ^	40.0		ug/L	1	3.50	10.0	1E27012	EPA 6010C	05/31/11 12:54	ACV	

**Description:** MW-8D

**Lab Sample ID:** B102269-09

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 15:00

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

### **Classical Chemistry Parameters**

*^ - ENCO Jacksonville certified analyte [NC 442]*

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Hexavalent Chromium [1854-02-99] ^	0.004	U	mg/L	1	0.004	0.030	1E25010	SM18 3500 Cr-D	05/25/11 13:05	sma	FILT
Oil & Grease (HEM) [C-0007] ^	3.00	U	mg/L	1	3.00	5.00	1E26006	EPA 1664A	05/31/11 09:08	MJF	

**Description:** MW-8D

**Lab Sample ID:** B102269-09

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 15:00

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Metals (total recoverable) by EPA 6000/7000 Series Methods**
<sup>^</sup> - ENCO Orlando certified analyte [NC 424]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Antimony [7440-36-0] ^	0.950	U	ug/L	1	0.950	20.0	1E26014	EPA 6020A	05/28/11 01:50	JMA	
Thallium [7440-28-0] ^	0.410	U	ug/L	1	0.410	1.00	1E26014	EPA 6020A	05/28/11 01:50	JMA	

**Description:** MW-8D

**Lab Sample ID:** B102269-09

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 15:00

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Gasoline Range Organics by GC**
<sup>^</sup> - ENCO Cary certified analyte [NC 591]

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>POL</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
GRO (C6-C10) [ECL-0069] ^	0.982		mg/L	1	0.011	0.055	1E31012	EPA 8015C	05/31/11 20:16	bpk	
<i>Surrogates</i>											
2,5-Dibromotoluene	0.0818	1	0.100	82 %	70-130		1E31012	EPA 8015C	05/31/11 20:16	bpk	Notes

**Description:** MW-12

**Matrix:** Ground Water

**Project:** Cooper Tools

**Lab Sample ID:** B102269-10

**Received:** 05/25/11 10:15

**Sampled:** 05/24/11 15:32

**Work Order:** B102269

**Sampled By:** Danny Hefner

### Volatile Organic Compounds by GCMS

<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.20	U	ug/L	1	0.20	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
1,1,1-Trichloroethane [71-55-6] ^	0.20	U	ug/L	1	0.20	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.32	U	ug/L	1	0.32	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
1,1,2-Trichloroethane [79-00-5] ^	0.40	U	ug/L	1	0.40	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
1,1-Dichloroethane [75-34-3] ^	0.30	U	ug/L	1	0.30	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
1,1-Dichloropropene [563-58-6] ^	0.21	U	ug/L	1	0.21	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
1,2,3-Trichlorobenzene [87-61-6] ^	0.50	U	ug/L	1	0.50	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
1,2,3-Trichloropropane [96-18-4] ^	0.30	U	ug/L	1	0.30	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
1,2,4-Trichlorobenzene [120-82-1] ^	0.41	U	ug/L	1	0.41	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
1,2,4-Trimethylbenzene [95-63-6] ^	0.28	U	ug/L	1	0.28	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.60	U	ug/L	1	0.60	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
1,2-Dibromoethane [106-93-4] ^	0.27	U	ug/L	1	0.27	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
1,2-Dichlorobenzene [95-50-1] ^	0.24	U	ug/L	1	0.24	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
1,2-Dichloroethane [107-06-2] ^	0.28	U	ug/L	1	0.28	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
1,2-Dichloropropane [78-87-5] ^	0.30	U	ug/L	1	0.30	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
1,3,5-Trimethylbenzene [108-67-8] ^	0.26	U	ug/L	1	0.26	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
1,3-Dichlorobenzene [541-73-1] ^	0.27	U	ug/L	1	0.27	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
1,3-Dichloropropane [142-28-9] ^	0.25	U	ug/L	1	0.25	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
1,4-Dichlorobenzene [106-46-7] ^	0.23	U	ug/L	1	0.23	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
2,2-Dichloropropane [594-20-7] ^	0.40	U	ug/L	1	0.40	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
2-Butanone [78-93-3] ^	0.38	U	ug/L	1	0.38	5.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
2-Chloroethyl Vinyl Ether [110-75-8] ^	1.5	U	ug/L	1	1.5	5.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
2-Chlorotoluene [95-49-8] ^	0.33	U	ug/L	1	0.33	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
2-Hexanone [591-78-6] ^	0.50	U	ug/L	1	0.50	5.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
4-Chlorotoluene [106-43-4] ^	0.22	U	ug/L	1	0.22	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
4-Isopropyltoluene [99-87-6] ^	0.29	U	ug/L	1	0.29	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
4-Methyl-2-pentanone [108-10-1] ^	1.0	U	ug/L	1	1.0	5.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
Acetone [67-64-1] ^	1.1	U	ug/L	1	1.1	5.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
Benzene [71-43-2] ^	0.27	U	ug/L	1	0.27	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
Bromobenzene [108-88-1] ^	0.26	U	ug/L	1	0.26	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
Bromochloromethane [74-97-5] ^	0.28	U	ug/L	1	0.28	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
Bromodichloromethane [75-27-4] ^	0.20	U	ug/L	1	0.20	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
Bromoform [75-25-2] ^	0.33	U	ug/L	1	0.33	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
Bromomethane [74-83-9] ^	0.64	U	ug/L	1	0.64	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
Carbon disulfide [75-15-0] ^	0.24	U	ug/L	1	0.24	5.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
Carbon tetrachloride [56-23-5] ^	0.20	U	ug/L	1	0.20	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
Chlorobenzene [108-90-7] ^	0.24	U	ug/L	1	0.24	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
Chloroethane [75-00-3] ^	0.31	U	ug/L	1	0.31	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
Chloroform [67-66-3] ^	0.21	U	ug/L	1	0.21	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
Chloromethane [74-87-3] ^	0.31	U	ug/L	1	0.31	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
cis-1,2-Dichloroethene [156-59-2] ^	0.22	U	ug/L	1	0.22	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
cis-1,3-Dichloropropene [10061-01-5] ^	0.35	U	ug/L	1	0.35	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
Dibromochloromethane [124-48-1] ^	0.27	U	ug/L	1	0.27	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
Dichlorodifluoromethane [75-71-8] ^	0.29	U	ug/L	1	0.29	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
Ethylbenzene [100-41-4] ^	0.26	U	ug/L	1	0.26	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
Hexachlorobutadiene [87-68-3] ^	0.35	U	ug/L	1	0.35	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
Isopropylbenzene [98-82-8] ^	0.20	U	ug/L	1	0.20	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
m,p-Xylenes [108-38-3/106-42-3] ^	0.50	U	ug/L	1	0.50	2.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
Methylene chloride [75-09-2] ^	0.62	U	ug/L	1	0.62	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	

**Description:** MW-12

**Lab Sample ID:** B102269-10

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 15:32

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Volatile Organic Compounds by GCMS**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>POL</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
Methyl-tert-Butyl Ether [1634-04-4] ^	0.24	U	ug/L	1	0.24	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
Naphthalene [91-20-3] ^	0.30	U	ug/L	1	0.30	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
n-Butyl Benzene [104-51-8] ^	0.28	U	ug/L	1	0.28	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
n-Propyl Benzene [103-65-1] ^	0.20	U	ug/L	1	0.20	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
o-Xylene [95-47-6] ^	0.25	U	ug/L	1	0.25	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
sec-Butylbenzene [135-98-8] ^	0.20	U	ug/L	1	0.20	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
Styrene [100-42-5] ^	0.32	U	ug/L	1	0.32	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
tert-Butylbenzene [98-06-6] ^	0.21	U	ug/L	1	0.21	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
Tetrachloroethene [127-18-4] ^	0.21	U	ug/L	1	0.21	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
Toluene [108-88-3] ^	0.30	U	ug/L	1	0.30	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
trans-1,2-Dichloroethene [156-60-5] ^	0.30	U	ug/L	1	0.30	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
trans-1,3-Dichloropropene [10061-02-6] ^	0.33	U	ug/L	1	0.33	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
Trichloroethene [79-01-6] ^	0.24	U	ug/L	1	0.24	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
Trichlorofluoromethane [75-69-4] ^	0.20	U	ug/L	1	0.20	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
Vinyl chloride [75-01-4] ^	0.33	U	ug/L	1	0.33	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
Xylenes (Total) [1330-20-7] ^	0.50	U	ug/L	1	0.50	1.0	1E31015	EPA 8260B	05/31/11 16:35	GMB	
<b>Surrogates</b>											
4-Bromofluorobenzene	51	1	50.0	101 %	62-132		1E31015	EPA 8260B	05/31/11 16:35	GMB	
Dibromofluoromethane	55	1	50.0	109 %	73-134		1E31015	EPA 8260B	05/31/11 16:35	GMB	
Toluene-d8	58	1	50.0	116 %	66-138		1E31015	EPA 8260B	05/31/11 16:35	GMB	

**Description:** MW-12

**Lab Sample ID:** B102269-10

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 15:32

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Non-Halogenated Volatile Organics by GC**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Ethylene Glycol [107-21-1] ^	4.1	U	mg/L	1	4.1	10	1E31002	EPA 8015C	05/31/11 14:23	LAC	
Propylene Glycol [57-55-6] ^	1.8	U	mg/L	1	1.8	10	1E31002	EPA 8015C	05/31/11 14:23	LAC	
<b>Surrogates</b>	<b>Results</b>	<b>DF</b>	<b>Spike Lvl</b>	<b>% Rec</b>	<b>% Rec Limits</b>		<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
1,3-Butylene Glycol	100	1	101	98.7 %	50-150		1E31002	EPA 8015C	05/31/11 14:23	LAC	

**Description:** MW-12

**Lab Sample ID:** B102269-10

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 15:32

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Diesel Range Organics by GC**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
DRO (C10-C28) [ECL-0057] ^	0.024	U	mg/L	1	0.024	0.10	1E25012	EPA 8015C	05/26/11 00:13	JSW	
<b>Surrogates</b>											
<i>o-Terphenyl</i>	<b>Results</b>	<b>DF</b>	<b>Spike Lvl</b>	<b>% Rec</b>	<b>% Rec Limits</b>		<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
	0.052	1	0.0515	100 %	63-139		1E25012	EPA 8015C	05/26/11 00:13	JSW	

**Description:** MW-12**Lab Sample ID:** B102269-10**Received:** 05/25/11 10:15**Matrix:** Ground Water**Sampled:** 05/24/11 15:32**Work Order:** B102269**Project:** Cooper Tools**Sampled By:** Danny Hefner**Metals by EPA 6000/7000 Series Methods**

^ - ENCO Jacksonville certified analyte [NC 442]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	0.133	IV	ug/L	1	0.108	0.300	1E31012	EPA 7470A	06/02/11 13:27	LTS	J-01

**Description:** MW-12

**Matrix:** Ground Water

**Project:** Cooper Tools

**Lab Sample ID:** B102269-10

**Sampled:** 05/24/11 15:32

**Sampled By:** Danny Hefner

**Received:** 05/25/11 10:15

**Work Order:** B102269

**Metals (total recoverable) by EPA 6000/7000 Series Methods**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>POL</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
Arsenic [7440-38-2] ^	6.70	U	ug/L	1	6.70	10.0	1E27012	EPA 6010C	05/31/11 13:00	ACV	
Beryllium [7440-41-7] ^	0.220	I	ug/L	1	0.100	1.00	1E27012	EPA 6010C	05/31/11 13:00	ACV	
Cadmium [7440-43-9] ^	0.384	I	ug/L	1	0.370	1.00	1E27012	EPA 6010C	05/31/11 13:00	ACV	
Chromium [7440-47-3] ^	2.10	I	ug/L	1	1.30	10.0	1E27012	EPA 6010C	05/31/11 13:00	ACV	
Copper [7440-50-8] ^	8.45	I	ug/L	1	1.50	10.0	1E27012	EPA 6010C	05/31/11 13:00	ACV	
Lead [7439-92-1] ^	7.22	I	ug/L	1	2.90	10.0	1E27012	EPA 6010C	05/31/11 13:00	ACV	
Nickel [7440-02-0] ^	11.4		ug/L	1	1.10	10.0	1E27012	EPA 6010C	05/31/11 13:00	ACV	
Selenium [7782-49-2] ^	8.90	U	ug/L	1	8.90	10.0	1E27012	EPA 6010C	05/31/11 13:00	ACV	
Silver [7440-22-4] ^	1.50	U	ug/L	1	1.50	10.0	1E27012	EPA 6010C	05/31/11 13:00	ACV	
Zinc [7440-66-6] ^	11.0		ug/L	1	3.50	10.0	1E27012	EPA 6010C	05/31/11 13:00	ACV	

**Description:** MW-12

**Lab Sample ID:** B102269-10

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 15:32

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Classical Chemistry Parameters**
*^ - ENCO Jacksonville certified analyte [NC 442]*

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Hexavalent Chromium [1854-02-99] ^	0.004	U	mg/L	1	0.004	0.030	1E25010	SM18 3500 Cr-D	05/25/11 13:05	sma	
Oil & Grease (HEM) [C-0007] ^	3.00	U	mg/L	1	3.00	5.00	1E26006	EPA 1664A	05/31/11 09:08	MJF	

**Description:** MW-12

**Lab Sample ID:** B102269-10

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 15:32

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Metals (total recoverable) by EPA 6000/7000 Series Methods**
<sup>^</sup> - ENCO Orlando certified analyte [NC 424]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>POL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Antimony [7440-36-0] ^	0.950	U	ug/L	1	0.950	20.0	1E26014	EPA 6020A	05/28/11 02:00	JMA	
Thallium [7440-28-0] ^	0.410	U	ug/L	1	0.410	1.00	1E26014	EPA 6020A	05/28/11 02:00	JMA	

**Description:** MW-12

**Lab Sample ID:** B102269-10

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 15:32

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Gasoline Range Organics by GC**
<sup>^</sup> - ENCO Cary certified analyte [INC 591]

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>POL</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
GRO (C6-C10) [ECL-0069] ^	0.023	I	mg/L	1	0.011	0.055	1E31012	EPA 8015C	05/31/11 20:48	bpk	
<b>Surrogates</b>											
2,5-Dibromotoluene	0.0823	I	0.100	82 %	70-130		1E31012	EPA 8015C	05/31/11 20:48	bpk	Notes



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**Description:** MW-13**Lab Sample ID:** B102269-11**Received:** 05/25/11 10:15**Matrix:** Ground Water**Sampled:** 05/24/11 16:00**Work Order:** B102269**Project:** Cooper Tools**Sampled By:** Danny Hefner**Volatile Organic Compounds by GCMS**

^ - ENCO Jacksonville certified analyte [NC 442]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	POL	Batch	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.20	U	ug/L	1	0.20	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
<b>1,1,1-Trichloroethane [71-55-6] ^</b>	<b>0.58</b>	I	ug/L	1	0.20	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.32	U	ug/L	1	0.32	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
1,1,2-Trichloroethane [79-00-5] ^	0.40	U	ug/L	1	0.40	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
1,1-Dichloroethane [75-34-3] ^	0.30	U	ug/L	1	0.30	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
<b>1,1-Dichloroethene [75-35-4] ^</b>	<b>150</b>		ug/L	5	1.0	5.0	1E31015	EPA 8260B	06/01/11 10:58	GMB	
1,1-Dichloropropene [563-58-6] ^	0.21	U	ug/L	1	0.21	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
1,2,3-Trichlorobenzene [87-61-6] ^	0.50	U	ug/L	1	0.50	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
1,2,3-Trichloropropane [96-18-4] ^	0.30	U	ug/L	1	0.30	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
1,2,4-Trichlorobenzene [120-82-1] ^	0.41	U	ug/L	1	0.41	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
1,2,4-Trimethylbenzene [95-63-6] ^	0.28	U	ug/L	1	0.28	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.60	U	ug/L	1	0.60	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
1,2-Dibromoethane [106-93-4] ^	0.27	U	ug/L	1	0.27	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
1,2-Dichlorobenzene [95-50-1] ^	0.24	U	ug/L	1	0.24	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
1,2-Dichloroethane [107-06-2] ^	0.28	U	ug/L	1	0.28	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
1,2-Dichloropropane [78-87-5] ^	0.30	U	ug/L	1	0.30	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
1,3,5-Trimethylbenzene [108-67-8] ^	0.26	U	ug/L	1	0.26	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
1,3-Dichlorobenzene [541-73-1] ^	0.27	U	ug/L	1	0.27	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
1,3-Dichloropropane [142-28-9] ^	0.25	U	ug/L	1	0.25	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
1,4-Dichlorobenzene [106-46-7] ^	0.23	U	ug/L	1	0.23	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
2,2-Dichloropropane [594-20-7] ^	0.40	U	ug/L	1	0.40	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
2-Butanone [78-93-3] ^	0.38	U	ug/L	1	0.38	5.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
2-Chloroethyl Vinyl Ether [110-75-8] ^	1.5	U	ug/L	1	1.5	5.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
2-Chlorotoluene [95-49-8] ^	0.33	U	ug/L	1	0.33	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
2-Hexanone [591-78-6] ^	0.50	U	ug/L	1	0.50	5.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
4-Chlorotoluene [106-43-4] ^	0.22	U	ug/L	1	0.22	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
4-Isopropyltoluene [99-87-6] ^	0.29	U	ug/L	1	0.29	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
4-Methyl-2-pentanone [108-10-1] ^	1.0	U	ug/L	1	1.0	5.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
<b>Acetone [67-64-1] ^</b>	<b>7.4</b>		ug/L	1	1.1	5.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
Benzene [71-43-2] ^	0.27	U	ug/L	1	0.27	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
Bromobenzene [108-86-1] ^	0.26	U	ug/L	1	0.26	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
Bromochloromethane [74-97-5] ^	0.28	U	ug/L	1	0.28	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
Bromodichloromethane [75-27-4] ^	0.20	U	ug/L	1	0.20	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
Bromoform [75-25-2] ^	0.33	U	ug/L	1	0.33	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
Bromomethane [74-83-9] ^	0.64	U	ug/L	1	0.64	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
Carbon disulfide [75-15-0] ^	0.24	U	ug/L	1	0.24	5.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
Carbon tetrachloride [56-23-5] ^	0.20	U	ug/L	1	0.20	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
Chlorobenzene [108-90-7] ^	0.24	U	ug/L	1	0.24	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
Chloroethane [75-00-3] ^	0.31	U	ug/L	1	0.31	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
<b>Chloroform [67-66-3] ^</b>	<b>2.3</b>		ug/L	1	0.21	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
Chloromethane [74-87-3] ^	0.31	U	ug/L	1	0.31	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
<b>cis-1,2-Dichloroethene [156-59-2] ^</b>	<b>22</b>		ug/L	1	0.22	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
cis-1,3-Dichloropropene [10061-01-5] ^	0.35	U	ug/L	1	0.35	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
Dibromochloromethane [124-48-1] ^	0.27	U	ug/L	1	0.27	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
Dichlorodifluoromethane [75-71-8] ^	0.29	U	ug/L	1	0.29	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
Ethylbenzene [100-41-4] ^	0.26	U	ug/L	1	0.26	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
Hexachlorobutadiene [87-68-3] ^	0.35	U	ug/L	1	0.35	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
Isopropylbenzene [98-82-8] ^	0.20	U	ug/L	1	0.20	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
m,p-Xylenes [108-38-3/106-42-3] ^	0.50	U	ug/L	1	0.50	2.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
Methylene chloride [75-09-2] ^	0.62	U	ug/L	1	0.62	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	

**Description:** MW-13

**Lab Sample ID:** B102269-11

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 16:00

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

### Volatile Organic Compounds by GCMS

<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	POL	Batch	Method	Analyzed	By	Notes
Methyl-tert-Butyl Ether [1634-04-4] ^	0.24	U	ug/L	1	0.24	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
Naphthalene [91-20-3] ^	0.30	U	ug/L	1	0.30	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
n-Butyl Benzene [104-51-8] ^	0.28	U	ug/L	1	0.28	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
n-Propyl Benzene [103-65-1] ^	0.20	U	ug/L	1	0.20	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
o-Xylene [95-47-6] ^	0.25	U	ug/L	1	0.25	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
sec-Butylbenzene [135-98-8] ^	0.20	U	ug/L	1	0.20	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
Styrene [100-42-5] ^	0.32	U	ug/L	1	0.32	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
tert-Butylbenzene [98-06-6] ^	0.21	U	ug/L	1	0.21	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
<b>Tetrachloroethene [127-18-4] ^</b>	<b>67</b>		ug/L	1	0.21	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
Toluene [108-88-3] ^	0.30	U	ug/L	1	0.30	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
trans-1,2-Dichloroethene [156-60-5] ^	0.30	U	ug/L	1	0.30	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
trans-1,3-Dichloropropene [10061-02-6] ^	0.33	U	ug/L	1	0.33	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
<b>Trichloroethene [79-01-6] ^</b>	<b>4.4</b>		ug/L	1	0.24	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
Trichlorofluoromethane [75-69-4] ^	0.20	U	ug/L	1	0.20	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
Vinyl chloride [75-01-4] ^	0.33	U	ug/L	1	0.33	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
Xylenes (Total) [1330-20-7] ^	0.50	U	ug/L	1	0.50	1.0	1E31015	EPA 8260B	05/31/11 17:10	GMB	
<b>Surrogates</b>											
4-Bromofluorobenzene	51	1	50.0	102 %	62-132	1E31015	EPA 8260B	05/31/11 17:10	GMB		
4-Bromofluorobenzene	50	1	50.0	99 %	62-132	1E31015	EPA 8260B	06/01/11 10:58	GMB		
Dibromoformmethane	56	1	50.0	112 %	73-134	1E31015	EPA 8260B	05/31/11 17:10	GMB		
Dibromoformmethane	54	1	50.0	107 %	73-134	1E31015	EPA 8260B	06/01/11 10:58	GMB		
Toluene-d8	58	1	50.0	115 %	66-138	1E31015	EPA 8260B	05/31/11 17:10	GMB		
Toluene-d8	58	1	50.0	116 %	66-138	1E31015	EPA 8260B	06/01/11 10:58	GMB		

**Description:** MW-13

**Lab Sample ID:** B102269-11

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 16:00

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Non-Halogenated Volatile Organics by GC**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>POL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Ethylene Glycol [107-21-1] ^	4.1	U	mg/L	1	4.1	10	1E31002	EPA 8015C	05/31/11 14:45	LAC	
Propylene Glycol [57-55-6] ^	1.8	U	mg/L	1	1.8	10	1E31002	EPA 8015C	05/31/11 14:45	LAC	

**Surrogates**

<b>1,3-Butylene Glycol</b>	<b>Results</b>	<b>DF</b>	<b>Spike Lvl</b>	<b>% Rec</b>	<b>% Rec Limits</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
	98	1	101	97.2 %	50-150	1E31002	EPA 8015C	05/31/11 14:45	LAC	

**Description:** MW-13

**Lab Sample ID:** B102269-11

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 16:00

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Diesel Range Organics by GC**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>POL</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
DRO (C10-C28) [ECL-0057] ^	0.092	I	mg/L	1	0.024	0.10	1E25012	EPA 8015C	05/26/11 00:36	JSW	
<b>Surrogates</b>											
<i>o-Terphenyl</i>	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes	
	0.055	1	0.0532	103 %	63-139	1E25012	EPA 8015C	05/26/11 00:36	JSW		

**Description:** MW-13**Matrix:** Ground Water**Project:** Cooper Tools**Lab Sample ID:** B102269-11**Sampled:** 05/24/11 16:00**Sampled By:** Danny Hefner**Received:** 05/25/11 10:15**Work Order:** B102269**Metals by EPA 6000/7000 Series Methods**

^ - ENCO Jacksonville certified analyte [NC 442]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	POL	Batch	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	0.0837	IV	ug/L	1	0.0720	0.200	1E31012	EPA 7470A	06/02/11 13:29	LTS	J-01

**Description:** MW-13

**Lab Sample ID:** B102269-11

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 16:00

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Metals (total recoverable) by EPA 6000/7000 Series Methods**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
Arsenic [7440-38-2] ^	6.70	U	ug/L	1	6.70	10.0	1E27012	EPA 6010C	05/31/11 13:02	ACV	
Beryllium [7440-41-7] ^	<b>0.110</b>	I	ug/L	1	0.100	1.00	1E27012	EPA 6010C	05/31/11 13:02	ACV	
Cadmium [7440-43-9] ^	0.370	U	ug/L	1	0.370	1.00	1E27012	EPA 6010C	05/31/11 13:02	ACV	
Chromium [7440-47-3] ^	<b>1.52</b>	I	ug/L	1	1.30	10.0	1E27012	EPA 6010C	05/31/11 13:02	ACV	
Copper [7440-50-8] ^	1.50	U	ug/L	1	1.50	10.0	1E27012	EPA 6010C	05/31/11 13:02	ACV	
Lead [7439-92-1] ^	2.90	U	ug/L	1	2.90	10.0	1E27012	EPA 6010C	05/31/11 13:02	ACV	
Nickel [7440-02-0] ^	<b>2.50</b>	I	ug/L	1	1.10	10.0	1E27012	EPA 6010C	05/31/11 13:02	ACV	
Selenium [7782-49-2] ^	8.90	U	ug/L	1	8.90	10.0	1E27012	EPA 6010C	05/31/11 13:02	ACV	
Silver [7440-22-4] ^	1.50	U	ug/L	1	1.50	10.0	1E27012	EPA 6010C	05/31/11 13:02	ACV	
Zinc [7440-66-6] ^	<b>4.78</b>	I	ug/L	1	3.50	10.0	1E27012	EPA 6010C	05/31/11 13:02	ACV	

**Description:** MW-13

**Lab Sample ID:** B102269-11

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 16:00

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Classical Chemistry Parameters**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Hexavalent Chromium [1854-02-99] ^	0.004	U	mg/L	1	0.004	0.030	1E25010	SM18 3500 Cr-D	05/25/11 13:05	sma	
Oil & Grease (HEM) [C-0007] ^	3.00	U	mg/L	1	3.00	5.00	1E26006	EPA 1664A	05/31/11 09:08	MJF	

**Description:** MW-13

**Lab Sample ID:** B102269-11

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 16:00

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Metals (total recoverable) by EPA 6000/7000 Series Methods**
*^ - ENCO Orlando certified analyte [NC 424]*

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Antimony [7440-36-0] ^	0.950	U	ug/L	1	0.950	20.0	1E26014	EPA 6020A	05/28/11 02:07	JMA	
Thallium [7440-28-0] ^	0.410	U	ug/L	1	0.410	1.00	1E26014	EPA 6020A	05/28/11 02:07	JMA	

**Description:** MW-13

**Lab Sample ID:** B102269-11

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 16:00

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Gasoline Range Organics by GC**
<sup>^</sup> - ENCO Cary certified analyte [NC 591]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>POL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
GRO (C6-C10) [ECL-0069] ^	0.035	I	mg/L	1	0.011	0.055	1E31012	EPA 8015C	05/31/11 21:19	bpk	
<b>Surrogates</b>	<b>Results</b>	<b>DF</b>	<b>Spike Lvl</b>	<b>% Rec</b>	<b>% Rec Limits</b>		<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
2,5-Dibromotoluene	0.0840	I	0.100	84 %	70-130		1E31012	EPA 8015C	05/31/11 21:19	bpk	

**Description:** BAILER BLANK

**Lab Sample ID:** B102269-12

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 10:51

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Volatile Organic Compounds by GCMS**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
1,1,1-Trichloroethane [71-55-6] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.32	U	ug/L	1	0.32	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
1,1,2-Trichloroethane [79-00-5] ^	0.40	U	ug/L	1	0.40	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
1,1-Dichloroethane [75-34-3] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
1,1-Dichloropropene [563-58-6] ^	0.21	U	ug/L	1	0.21	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
1,2,3-Trichlorobenzene [87-61-6] ^	0.50	U	ug/L	1	0.50	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
1,2,3-Trichloropropane [96-18-4] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
1,2,4-Trichlorobenzene [120-82-1] ^	0.41	U	ug/L	1	0.41	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
1,2,4-Trimethylbenzene [95-63-6] ^	0.28	U	ug/L	1	0.28	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.60	U	ug/L	1	0.60	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
1,2-Dibromoethane [106-93-4] ^	0.27	U	ug/L	1	0.27	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
1,2-Dichlorobenzene [95-50-1] ^	0.24	U	ug/L	1	0.24	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
1,2-Dichloroethane [107-06-2] ^	0.28	U	ug/L	1	0.28	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
1,2-Dichloropropane [78-87-5] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
1,3,5-Trimethylbenzene [108-67-8] ^	0.26	U	ug/L	1	0.26	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
1,3-Dichlorobenzene [541-73-1] ^	0.27	U	ug/L	1	0.27	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
1,3-Dichloropropane [142-28-9] ^	0.25	U	ug/L	1	0.25	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
1,4-Dichlorobenzene [106-46-7] ^	0.23	U	ug/L	1	0.23	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
2,2-Dichloropropane [594-20-7] ^	0.40	U	ug/L	1	0.40	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
2-Butanone [78-93-3] ^	0.38	U	ug/L	1	0.38	5.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
2-Chloroethyl Vinyl Ether [110-75-8] ^	1.5	U	ug/L	1	1.5	5.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
2-Chlorotoluene [95-49-8] ^	0.33	U	ug/L	1	0.33	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
2-Hexanone [591-78-6] ^	0.50	U	ug/L	1	0.50	5.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
4-Chlorotoluene [106-43-4] ^	0.22	U	ug/L	1	0.22	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
4-Isopropyltoluene [99-87-6] ^	0.29	U	ug/L	1	0.29	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
4-Methyl-2-pentanone [108-10-1] ^	1.0	U	ug/L	1	1.0	5.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
Acetone [67-64-1] ^	1.1	U	ug/L	1	1.1	5.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
Benzene [71-43-2] ^	0.27	U	ug/L	1	0.27	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
Bromobenzene [108-86-1] ^	0.26	U	ug/L	1	0.26	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
Bromochloromethane [74-97-5] ^	0.28	U	ug/L	1	0.28	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
Bromodichloromethane [75-27-4] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
Bromoform [75-25-2] ^	0.33	U	ug/L	1	0.33	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
Bromomethane [74-83-9] ^	0.64	U	ug/L	1	0.64	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
Carbon disulfide [75-15-0] ^	0.24	U	ug/L	1	0.24	5.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
Carbon tetrachloride [56-23-5] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
Chlorobenzene [108-90-7] ^	0.24	U	ug/L	1	0.24	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
Chloroethane [75-00-3] ^	0.31	U	ug/L	1	0.31	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
Chloroform [67-66-3] ^	0.21	U	ug/L	1	0.21	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
Chloromethane [74-87-3] ^	0.31	U	ug/L	1	0.31	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
cis-1,2-Dichloroethene [156-59-2] ^	0.22	U	ug/L	1	0.22	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
cis-1,3-Dichloropropene [10061-01-5] ^	0.35	U	ug/L	1	0.35	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
Dibromochloromethane [124-48-1] ^	0.27	U	ug/L	1	0.27	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
Dichlorodifluoromethane [75-71-8] ^	0.29	U	ug/L	1	0.29	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
Ethylbenzene [100-41-4] ^	0.26	U	ug/L	1	0.26	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
Hexachlorobutadiene [87-68-3] ^	0.35	U	ug/L	1	0.35	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
Isopropylbenzene [98-82-8] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
m,p-Xylenes [108-38-3/106-42-3] ^	0.50	U	ug/L	1	0.50	2.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
Methylene chloride [75-09-2] ^	0.62	U	ug/L	1	0.62	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	

**Description:** BAILER BLANK

**Lab Sample ID:** B102269-12

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 10:51

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Volatile Organic Compounds by GCMS**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>POL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Methyl-tert-Butyl Ether [1634-04-4] ^	0.24	U	ug/L	1	0.24	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
Naphthalene [91-20-3] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
n-Butyl Benzene [104-51-8] ^	0.28	U	ug/L	1	0.28	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
n-Propyl Benzene [103-65-1] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
o-Xylene [95-47-6] ^	0.25	U	ug/L	1	0.25	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
sec-Butylbenzene [135-98-8] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
Styrene [100-42-5] ^	0.32	U	ug/L	1	0.32	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
tert-Butylbenzene [98-06-6] ^	0.21	U	ug/L	1	0.21	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
Tetrachloroethene [127-18-4] ^	0.21	U	ug/L	1	0.21	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
Toluene [108-88-3] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
trans-1,2-Dichloroethene [156-60-5] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
trans-1,3-Dichloropropene [10061-02-6] ^	0.33	U	ug/L	1	0.33	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
Trichloroethene [79-01-6] ^	0.24	U	ug/L	1	0.24	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
Trichlorofluoromethane [75-69-4] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
Vinyl chloride [75-01-4] ^	0.33	U	ug/L	1	0.33	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
Xylenes (Total) [1330-20-7] ^	0.50	U	ug/L	1	0.50	1.0	1E26018	EPA 8260B	05/27/11 20:28	GMB	
<b>Surrogates</b>											
4-Bromofluorobenzene	50	1	50.0	100 %	62-132		1E26018	EPA 8260B	05/27/11 20:28	GMB	
Dibromofluoromethane	53	1	50.0	105 %	73-134		1E26018	EPA 8260B	05/27/11 20:28	GMB	
Toluene-d8	58	1	50.0	117 %	66-138		1E26018	EPA 8260B	05/27/11 20:28	GMB	

**Description:** BAILER BLANK

**Lab Sample ID:** B102269-12

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 10:51

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Non-Halogenated Volatile Organics by GC**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Ethylene Glycol [107-21-1] ^	4.1	U	mg/L	1	4.1	10	1E31002	EPA 8015C	05/31/11 14:56	LAC	
Propylene Glycol [57-55-6] ^	1.8	U	mg/L	1	1.8	10	1E31002	EPA 8015C	05/31/11 14:56	LAC	
<b>Surrogates</b>	<b>Results</b>	<b>DF</b>	<b>Spike Lvl</b>	<b>% Rec</b>	<b>% Rec Limits</b>		<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
1,3-Butylene Glycol	100	1	101	98.5 %	50-150		1E31002	EPA 8015C	05/31/11 14:56	LAC	

**Description:** BAILER BLANK

**Lab Sample ID:** B102269-12

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 10:51

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Diesel Range Organics by GC**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
DRO (C10-C28) [ECL-0057] ^	0.024	U	mg/L	1	0.024	0.10	1E25012	EPA 8015C	05/26/11 01:00	JSW	
<b>Surrogates</b>											
<i>o-Terphenyl</i>	<b>Results</b>	<b>DF</b>	<b>Spike Lvl</b>	<b>% Rec</b>	<b>% Rec Limits</b>		<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
	0.054	1	0.0521	104 %	63-139		1E25012	EPA 8015C	05/26/11 01:00	JSW	

**Description:** BAILER BLANK**Lab Sample ID:** B102269-12**Received:** 05/25/11 10:15**Matrix:** Ground Water**Sampled:** 05/24/11 10:51**Work Order:** B102269**Project:** Cooper Tools**Sampled By:** Danny Hefner**Metals by EPA 6000/7000 Series Methods**

^ - ENCO Jacksonville certified analyte [NC 442]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	POL	Batch	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	0.0851	IV	ug/L	1	0.0720	0.200	1E31012	EPA 7470A	06/02/11 13:30	LTS	J-01

**Description:** BAILER BLANK

**Lab Sample ID:** B102269-12

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 10:51

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Metals (total recoverable) by EPA 6000/7000 Series Methods**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>POL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Arsenic [7440-38-2] ^	6.70	U	ug/L	1	6.70	10.0	1E27012	EPA 6010C	05/31/11 13:04	ACV	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1E27012	EPA 6010C	05/31/11 13:04	ACV	
Cadmium [7440-43-9] ^	0.370	U	ug/L	1	0.370	1.00	1E27012	EPA 6010C	05/31/11 13:04	ACV	
Chromium [7440-47-3] ^	1.30	U	ug/L	1	1.30	10.0	1E27012	EPA 6010C	05/31/11 13:04	ACV	
Copper [7440-50-8] ^	1.50	U	ug/L	1	1.50	10.0	1E27012	EPA 6010C	05/31/11 13:04	ACV	
Lead [7439-92-1] ^	2.90	U	ug/L	1	2.90	10.0	1E27012	EPA 6010C	05/31/11 13:04	ACV	
Nickel [7440-02-0] ^	1.10	U	ug/L	1	1.10	10.0	1E27012	EPA 6010C	05/31/11 13:04	ACV	
Selenium [7782-49-2] ^	8.90	U	ug/L	1	8.90	10.0	1E27012	EPA 6010C	05/31/11 13:04	ACV	
Silver [7440-22-4] ^	1.50	U	ug/L	1	1.50	10.0	1E27012	EPA 6010C	05/31/11 13:04	ACV	
Zinc [7440-66-6] ^	3.50	U	ug/L	1	3.50	10.0	1E27012	EPA 6010C	05/31/11 13:04	ACV	

**Description:** BAILER BLANK**Lab Sample ID:** B102269-12**Received:** 05/25/11 10:15**Matrix:** Ground Water**Sampled:** 05/24/11 10:51**Work Order:** B102269**Project:** Cooper Tools**Sampled By:** Danny Hefner**Classical Chemistry Parameters***^ - ENCO Jacksonville certified analyte [NC 442]*

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Hexavalent Chromium [1854-02-99] ^	0.004	U	mg/L	1	0.004	0.030	1E25010	SM18 3500 Cr-D	05/25/11 10:35	sma	
Oil & Grease (HEM) [C-0007] ^	3.00	U	mg/L	1	3.00	5.00	1E26006	EPA 1664A	05/31/11 09:08	MJF	

**Description:** BAILER BLANK

**Lab Sample ID:** B102269-12

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 10:51

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Metals (total recoverable) by EPA 6000/7000 Series Methods**
<sup>^</sup> - ENCO Orlando certified analyte [NC 424]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Antimony [7440-36-0] ^	0.950	U	ug/L	1	0.950	20.0	1E26014	EPA 6020A	05/28/11 02:14	JMA	
Thallium [7440-28-0] ^	0.410	U	ug/L	1	0.410	1.00	1E26014	EPA 6020A	05/28/11 02:14	JMA	

**Description:** BAILER BLANK

**Lab Sample ID:** B102269-12

**Received:** 05/25/11 10:15

**Matrix:** Ground Water

**Sampled:** 05/24/11 10:51

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Gasoline Range Organics by GC**
<sup>^</sup> - ENCO Cary certified analyte [NC 591]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
GRO (C6-C10) [ECL-0069] ^	0.011	U	mg/L	1	0.011	0.055	1E31012	EPA 8015C	05/31/11 21:50	bpk	
<b>Surrogates</b>	<b>Results</b>	<b>DF</b>	<b>Spike Lvl</b>	<b>% Rec</b>	<b>% Rec Limits</b>		<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
2,5-Dibromotoluene	0.0761	1	0.100	76 %	70-130		1E31012	EPA 8015C	05/31/11 21:50	bpk	

**Description:** TRIP BLANK 1

**Lab Sample ID:** B102269-13

**Received:** 05/25/11 10:15

**Matrix:** Water

**Sampled:** 05/24/11 00:00

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Lab

**Volatile Organic Compounds by GCMS**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
1,1,1-Trichloroethane [71-55-6] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.32	U	ug/L	1	0.32	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
1,1,2-Trichloroethane [79-00-5] ^	0.40	U	ug/L	1	0.40	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
1,1-Dichloroethane [75-34-3] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
1,1-Dichloropropene [563-58-6] ^	0.21	U	ug/L	1	0.21	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
1,2,3-Trichlorobenzene [87-61-6] ^	0.50	U	ug/L	1	0.50	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
1,2,3-Trichloropropane [96-18-4] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
1,2,4-Trichlorobenzene [120-82-1] ^	0.41	U	ug/L	1	0.41	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
1,2,4-Trimethylbenzene [95-63-6] ^	0.28	U	ug/L	1	0.28	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.60	U	ug/L	1	0.60	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
1,2-Dibromoethane [106-93-4] ^	0.27	U	ug/L	1	0.27	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
1,2-Dichlorobenzene [95-50-1] ^	0.24	U	ug/L	1	0.24	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
1,2-Dichloroethane [107-06-2] ^	0.28	U	ug/L	1	0.28	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
1,2-Dichloropropane [78-87-5] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
1,3,5-Trimethylbenzene [108-67-8] ^	0.26	U	ug/L	1	0.26	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
1,3-Dichlorobenzene [541-73-1] ^	0.27	U	ug/L	1	0.27	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
1,3-Dichloropropane [142-28-9] ^	0.25	U	ug/L	1	0.25	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
1,4-Dichlorobenzene [106-46-7] ^	0.23	U	ug/L	1	0.23	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
2,2-Dichloropropane [594-20-7] ^	0.40	U	ug/L	1	0.40	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
2-Butanone [78-93-3] ^	0.38	U	ug/L	1	0.38	5.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
2-Chloroethyl Vinyl Ether [110-75-8] ^	1.5	U	ug/L	1	1.5	5.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
2-Chlorotoluene [95-49-8] ^	0.33	U	ug/L	1	0.33	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
2-Hexanone [591-78-6] ^	0.50	U	ug/L	1	0.50	5.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
4-Chlorotoluene [106-43-4] ^	0.22	U	ug/L	1	0.22	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
4-Isopropyltoluene [99-87-6] ^	0.29	U	ug/L	1	0.29	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
4-Methyl-2-pentanone [108-10-1] ^	1.0	U	ug/L	1	1.0	5.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
Acetone [67-64-1] ^	1.1	U	ug/L	1	1.1	5.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
Benzene [71-43-2] ^	0.27	U	ug/L	1	0.27	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
Bromobenzene [108-86-1] ^	0.26	U	ug/L	1	0.26	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
Bromochloromethane [74-97-5] ^	0.28	U	ug/L	1	0.28	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
Bromodichloromethane [75-27-4] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
Bromoform [75-25-2] ^	0.33	U	ug/L	1	0.33	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
Bromomethane [74-83-9] ^	0.64	U	ug/L	1	0.64	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
Carbon disulfide [75-15-0] ^	0.24	U	ug/L	1	0.24	5.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
Carbon tetrachloride [56-23-5] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
Chlorobenzene [108-90-7] ^	0.24	U	ug/L	1	0.24	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
Chloroethane [75-00-3] ^	0.31	U	ug/L	1	0.31	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
Chloroform [67-66-3] ^	0.21	U	ug/L	1	0.21	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
Chloromethane [74-87-3] ^	0.31	U	ug/L	1	0.31	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
cis-1,2-Dichloroethene [156-59-2] ^	0.22	U	ug/L	1	0.22	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
cis-1,3-Dichloropropene [10061-01-5] ^	0.35	U	ug/L	1	0.35	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
Dibromochloromethane [124-48-1] ^	0.27	U	ug/L	1	0.27	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
Dichlorodifluoromethane [75-71-8] ^	0.29	U	ug/L	1	0.29	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
Ethylbenzene [100-41-4] ^	0.26	U	ug/L	1	0.26	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
Hexachlorobutadiene [87-68-3] ^	0.35	U	ug/L	1	0.35	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
Isopropylbenzene [98-82-8] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
m,p-Xylenes [108-38-3/106-42-3] ^	0.50	U	ug/L	1	0.50	2.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
Methylene chloride [75-09-2] ^	0.62	U	ug/L	1	0.62	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	

**Description:** TRIP BLANK 1

**Lab Sample ID:** B102269-13

**Received:** 05/25/11 10:15

**Matrix:** Water

**Sampled:** 05/24/11 00:00

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Lab

**Volatile Organic Compounds by GCMS**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>POL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Methyl-tert-Butyl Ether [1634-04-4] ^	0.24	U	ug/L	1	0.24	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
Naphthalene [91-20-3] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
n-Butyl Benzene [104-51-8] ^	0.28	U	ug/L	1	0.28	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
n-Propyl Benzene [103-65-1] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
o-Xylene [95-47-6] ^	0.25	U	ug/L	1	0.25	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
sec-Butylbenzene [135-98-8] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
Styrene [100-42-5] ^	0.32	U	ug/L	1	0.32	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
tert-Butylbenzene [98-06-6] ^	0.21	U	ug/L	1	0.21	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
Tetrachloroethene [127-18-4] ^	0.21	U	ug/L	1	0.21	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
Toluene [108-88-3] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
trans-1,2-Dichloroethene [156-60-5] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
trans-1,3-Dichloropropene [10061-02-6] ^	0.33	U	ug/L	1	0.33	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
Trichloroethene [79-01-6] ^	0.24	U	ug/L	1	0.24	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
Trichlorofluoromethane [75-69-4] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
Vinyl chloride [75-01-4] ^	0.33	U	ug/L	1	0.33	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
Xylenes (Total) [1330-20-7] ^	0.50	U	ug/L	1	0.50	1.0	1E26018	EPA 8260B	05/27/11 21:03	GMB	
<hr/>											
<b>Surrogates</b>	<b>Results</b>	<b>DF</b>	<b>Spike Lvl</b>	<b>% Rec</b>	<b>% Rec Limits</b>		<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
4-Bromofluorobenzene	49	1	50.0	98 %	62-132		1E26018	EPA 8260B	05/27/11 21:03	GMB	
Dibromofluoromethane	52	1	50.0	105 %	73-134		1E26018	EPA 8260B	05/27/11 21:03	GMB	
Toluene-d8	58	1	50.0	116 %	66-138		1E26018	EPA 8260B	05/27/11 21:03	GMB	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

**Description:** TRIP BLANK 2

**Lab Sample ID:** B102269-14

**Received:** 05/25/11 10:15

**Matrix:** Water

**Sampled:** 05/24/11 00:00

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Lab

**Volatile Organic Compounds by GCMS**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
1,1,1-Trichloroethane [71-55-6] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.32	U	ug/L	1	0.32	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
1,1,2-Trichloroethane [79-00-5] ^	0.40	U	ug/L	1	0.40	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
1,1-Dichloroethane [75-34-3] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
1,1-Dichloropropene [563-58-6] ^	0.21	U	ug/L	1	0.21	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
1,2,3-Trichlorobenzene [87-61-6] ^	0.50	U	ug/L	1	0.50	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
1,2,3-Trichloropropane [96-18-4] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
1,2,4-Trichlorobenzene [120-82-1] ^	0.41	U	ug/L	1	0.41	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
1,2,4-Trimethylbenzene [95-63-6] ^	0.28	U	ug/L	1	0.28	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.60	U	ug/L	1	0.60	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
1,2-Dibromoethane [106-93-4] ^	0.27	U	ug/L	1	0.27	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
1,2-Dichlorobenzene [95-50-1] ^	0.24	U	ug/L	1	0.24	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
1,2-Dichloroethane [107-06-2] ^	0.28	U	ug/L	1	0.28	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
1,2-Dichloropropane [78-87-5] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
1,3,5-Trimethylbenzene [108-67-8] ^	0.26	U	ug/L	1	0.26	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
1,3-Dichlorobenzene [541-73-1] ^	0.27	U	ug/L	1	0.27	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
1,3-Dichloropropane [142-28-9] ^	0.25	U	ug/L	1	0.25	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
1,4-Dichlorobenzene [106-46-7] ^	0.23	U	ug/L	1	0.23	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
2,2-Dichloropropane [594-20-7] ^	0.40	U	ug/L	1	0.40	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
2-Butanone [78-93-3] ^	0.38	U	ug/L	1	0.38	5.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
2-Chloroethyl Vinyl Ether [110-75-8] ^	1.5	U	ug/L	1	1.5	5.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
2-Chlorotoluene [95-49-8] ^	0.33	U	ug/L	1	0.33	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
2-Hexanone [591-78-6] ^	0.50	U	ug/L	1	0.50	5.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
4-Chlorotoluene [106-43-4] ^	0.22	U	ug/L	1	0.22	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
4-Isopropyltoluene [99-87-6] ^	0.29	U	ug/L	1	0.29	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
4-Methyl-2-pentanone [108-10-1] ^	1.0	U	ug/L	1	1.0	5.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
Acetone [67-64-1] ^	1.1	U	ug/L	1	1.1	5.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
Benzene [71-43-2] ^	0.27	U	ug/L	1	0.27	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
Bromobenzene [108-86-1] ^	0.26	U	ug/L	1	0.26	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
Bromochloromethane [74-97-5] ^	0.28	U	ug/L	1	0.28	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
Bromodichloromethane [75-27-4] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
Bromoform [75-25-2] ^	0.33	U	ug/L	1	0.33	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
Bromomethane [74-83-9] ^	0.64	U	ug/L	1	0.64	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
Carbon disulfide [75-15-0] ^	0.24	U	ug/L	1	0.24	5.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
Carbon tetrachloride [56-23-5] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
Chlorobenzene [108-90-7] ^	0.24	U	ug/L	1	0.24	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
Chloroethane [75-00-3] ^	0.31	U	ug/L	1	0.31	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
Chloroform [67-66-3] ^	0.21	U	ug/L	1	0.21	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
Chloromethane [74-87-3] ^	0.31	U	ug/L	1	0.31	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
cis-1,2-Dichloroethene [156-59-2] ^	0.22	U	ug/L	1	0.22	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
cis-1,3-Dichloropropene [10061-01-5] ^	0.35	U	ug/L	1	0.35	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
Dibromochloromethane [124-48-1] ^	0.27	U	ug/L	1	0.27	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
Dichlorodifluoromethane [75-71-8] ^	0.29	U	ug/L	1	0.29	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
Ethylbenzene [100-41-4] ^	0.26	U	ug/L	1	0.26	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
Hexachlorobutadiene [87-68-3] ^	0.35	U	ug/L	1	0.35	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
Isopropylbenzene [98-82-8] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
m,p-Xylenes [108-38-3/106-42-3] ^	0.50	U	ug/L	1	0.50	2.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
Methylene chloride [75-09-2] ^	0.62	U	ug/L	1	0.62	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	

**Description:** TRIP BLANK 2

**Lab Sample ID:** B102269-14

**Received:** 05/25/11 10:15

**Matrix:** Water

**Sampled:** 05/24/11 00:00

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Lab

### Volatile Organic Compounds by GCMS

<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Methyl-tert-Butyl Ether [1634-04-4] ^	0.24	U	ug/L	1	0.24	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
Naphthalene [91-20-3] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
n-Butyl Benzene [104-51-8] ^	0.28	U	ug/L	1	0.28	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
n-Propyl Benzene [103-65-1] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
o-Xylene [95-47-6] ^	0.25	U	ug/L	1	0.25	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
sec-Butylbenzene [135-98-8] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
Styrene [100-42-5] ^	0.32	U	ug/L	1	0.32	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
tert-Butylbenzene [98-06-6] ^	0.21	U	ug/L	1	0.21	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
Tetrachloroethene [127-18-4] ^	0.21	U	ug/L	1	0.21	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
Toluene [108-88-3] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
trans-1,2-Dichloroethene [156-60-5] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
trans-1,3-Dichloropropene [10061-02-6] ^	0.33	U	ug/L	1	0.33	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
Trichloroethene [79-01-6] ^	0.24	U	ug/L	1	0.24	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
Trichlorofluoromethane [75-69-4] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
Vinyl chloride [75-01-4] ^	0.33	U	ug/L	1	0.33	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
Xylenes (Total) [1330-20-7] ^	0.50	U	ug/L	1	0.50	1.0	1E26018	EPA 8260B	05/27/11 21:37	GMB	
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Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes	
4-Bromofluorobenzene	50	1	50.0	100 %	62-132	1E26018	EPA 8260B	05/27/11 21:37	GMB		
Dibromofluoromethane	53	1	50.0	105 %	73-134	1E26018	EPA 8260B	05/27/11 21:37	GMB		
Toluene-d8	59	1	50.0	118 %	66-138	1E26018	EPA 8260B	05/27/11 21:37	GMB		

**Description:** TRIP BLANK 3

**Lab Sample ID:** B102269-15

**Received:** 05/25/11 10:15

**Matrix:** Water

**Sampled:** 05/24/11 00:00

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Lab

**Volatile Organic Compounds by GCMS**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>POL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
1,1,1-Trichloroethane [71-55-6] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.32	U	ug/L	1	0.32	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
1,1,2-Trichloroethane [79-00-5] ^	0.40	U	ug/L	1	0.40	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
1,1-Dichloroethane [75-34-3] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
1,1-Dichloropropene [563-58-6] ^	0.21	U	ug/L	1	0.21	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
1,2,3-Trichlorobenzene [87-61-6] ^	0.50	U	ug/L	1	0.50	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
1,2,3-Trichloropropane [96-18-4] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
1,2,4-Trichlorobenzene [120-82-1] ^	0.41	U	ug/L	1	0.41	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
1,2,4-Trimethylbenzene [95-63-6] ^	0.28	U	ug/L	1	0.28	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.60	U	ug/L	1	0.60	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
1,2-Dibromoethane [106-93-4] ^	0.27	U	ug/L	1	0.27	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
1,2-Dichlorobenzene [95-50-1] ^	0.24	U	ug/L	1	0.24	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
1,2-Dichloroethane [107-06-2] ^	0.28	U	ug/L	1	0.28	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
1,2-Dichloropropane [78-87-5] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
1,3,5-Trimethylbenzene [108-67-8] ^	0.26	U	ug/L	1	0.26	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
1,3-Dichlorobenzene [541-73-1] ^	0.27	U	ug/L	1	0.27	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
1,3-Dichloropropane [142-28-9] ^	0.25	U	ug/L	1	0.25	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
1,4-Dichlorobenzene [106-46-7] ^	0.23	U	ug/L	1	0.23	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
2,2-Dichloropropane [594-20-7] ^	0.40	U	ug/L	1	0.40	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
2-Butanone [78-93-3] ^	0.38	U	ug/L	1	0.38	5.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
2-Chloroethyl Vinyl Ether [110-75-8] ^	1.5	U	ug/L	1	1.5	5.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
2-Chlorotoluene [95-49-8] ^	0.33	U	ug/L	1	0.33	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
2-Hexanone [591-78-6] ^	0.50	U	ug/L	1	0.50	5.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
4-Chlorotoluene [106-43-4] ^	0.22	U	ug/L	1	0.22	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
4-Isopropyltoluene [99-87-6] ^	0.29	U	ug/L	1	0.29	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
4-Methyl-2-pentanone [108-10-1] ^	1.0	U	ug/L	1	1.0	5.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
Acetone [67-64-1] ^	1.1	U	ug/L	1	1.1	5.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
Benzene [71-43-2] ^	0.27	U	ug/L	1	0.27	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
Bromobenzene [108-86-1] ^	0.26	U	ug/L	1	0.26	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
Bromochloromethane [74-97-5] ^	0.28	U	ug/L	1	0.28	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
Bromodichloromethane [75-27-4] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
Bromform [75-25-2] ^	0.33	U	ug/L	1	0.33	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
Bromomethane [74-83-9] ^	0.64	U	ug/L	1	0.64	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
Carbon disulfide [75-15-0] ^	0.24	U	ug/L	1	0.24	5.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
Carbon tetrachloride [56-23-5] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
Chlorobenzene [108-90-7] ^	0.24	U	ug/L	1	0.24	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
Chloroethane [75-00-3] ^	0.31	U	ug/L	1	0.31	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
Chloroform [67-66-3] ^	0.21	U	ug/L	1	0.21	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
Chloromethane [74-87-3] ^	0.31	U	ug/L	1	0.31	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
cis-1,2-Dichloroethene [156-59-2] ^	0.22	U	ug/L	1	0.22	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
cis-1,3-Dichloropropene [10061-01-5] ^	0.35	U	ug/L	1	0.35	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
Dibromochloromethane [124-48-1] ^	0.27	U	ug/L	1	0.27	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
Dichlorodifluoromethane [75-71-8] ^	0.29	U	ug/L	1	0.29	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
Ethylbenzene [100-41-4] ^	0.26	U	ug/L	1	0.26	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
Hexachlorobutadiene [87-68-3] ^	0.35	U	ug/L	1	0.35	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
Isopropylbenzene [98-82-8] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
m,p-Xylenes [108-38-3/106-42-3] ^	0.50	U	ug/L	1	0.50	2.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
Methylene chloride [75-09-2] ^	0.62	U	ug/L	1	0.62	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	

**Description:** TRIP BLANK 3

**Lab Sample ID:** B102269-15

**Received:** 05/25/11 10:15

**Matrix:** Water

**Sampled:** 05/24/11 00:00

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Lab

**Volatile Organic Compounds by GCMS**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Methyl-tert-Butyl Ether [1634-04-4] ^	0.24	U	ug/L	1	0.24	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
Naphthalene [91-20-3] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
n-Butyl Benzene [104-51-8] ^	0.28	U	ug/L	1	0.28	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
n-Propyl Benzene [103-65-1] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
o-Xylene [95-47-6] ^	0.25	U	ug/L	1	0.25	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
sec-Butylbenzene [135-98-8] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
Styrene [100-42-5] ^	0.32	U	ug/L	1	0.32	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
tert-Butylbenzene [98-06-6] ^	0.21	U	ug/L	1	0.21	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
Tetrachloroethene [127-18-4] ^	0.21	U	ug/L	1	0.21	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
Toluene [108-88-3] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
trans-1,2-Dichloroethene [156-60-5] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
trans-1,3-Dichloropropene [10061-02-6] ^	0.33	U	ug/L	1	0.33	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
Trichloroethene [79-01-6] ^	0.24	U	ug/L	1	0.24	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
Trichlorofluoromethane [75-69-4] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
Vinyl chloride [75-01-4] ^	0.33	U	ug/L	1	0.33	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
Xylenes (Total) [1330-20-7] ^	0.50	U	ug/L	1	0.50	1.0	1E26018	EPA 8260B	05/27/11 22:12	GMB	
<hr/>											
<b>Surrogates</b>	<b>Results</b>	<b>DF</b>	<b>Spike Lvl</b>	<b>% Rec</b>	<b>% Rec Limits</b>		<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
4-Bromofluorobenzene	49	1	50.0	99 %	62-132		1E26018	EPA 8260B	05/27/11 22:12	GMB	
Dibromofluoromethane	52	1	50.0	104 %	73-134		1E26018	EPA 8260B	05/27/11 22:12	GMB	
Toluene-d8	57	1	50.0	114 %	66-138		1E26018	EPA 8260B	05/27/11 22:12	GMB	

**Description:** TRIP BLANK 4

**Lab Sample ID:** B102269-16

**Received:** 05/25/11 10:15

**Matrix:** Water

**Sampled:** 05/24/11 00:00

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Lab

**Volatile Organic Compounds by GCMS**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>POI</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
1,1,1-Trichloroethane [71-55-6] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.32	U	ug/L	1	0.32	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
1,1,2-Trichloroethane [79-00-5] ^	0.40	U	ug/L	1	0.40	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
1,1-Dichloroethane [75-34-3] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
1,1-Dichloropropene [563-58-6] ^	0.21	U	ug/L	1	0.21	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
1,2,3-Trichlorobenzene [87-61-6] ^	0.50	U	ug/L	1	0.50	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
1,2,3-Trichloropropane [96-18-4] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
1,2,4-Trichlorobenzene [120-82-1] ^	0.41	U	ug/L	1	0.41	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
1,2,4-Trimethylbenzene [95-63-6] ^	0.28	U	ug/L	1	0.28	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.60	U	ug/L	1	0.60	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
1,2-Dibromoethane [106-93-4] ^	0.27	U	ug/L	1	0.27	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
1,2-Dichlorobenzene [95-50-1] ^	0.24	U	ug/L	1	0.24	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
1,2-Dichloroethane [107-06-2] ^	0.28	U	ug/L	1	0.28	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
1,2-Dichloropropane [78-87-5] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
1,3,5-Trimethylbenzene [108-67-8] ^	0.26	U	ug/L	1	0.26	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
1,3-Dichlorobenzene [541-73-1] ^	0.27	U	ug/L	1	0.27	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
1,3-Dichloropropane [142-28-9] ^	0.25	U	ug/L	1	0.25	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
1,4-Dichlorobenzene [106-46-7] ^	0.23	U	ug/L	1	0.23	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
2,2-Dichloropropane [594-20-7] ^	0.40	U	ug/L	1	0.40	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
2-Butanone [78-93-3] ^	0.38	U	ug/L	1	0.38	5.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
2-Chloroethyl Vinyl Ether [110-75-8] ^	1.5	U	ug/L	1	1.5	5.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
2-Chlorotoluene [95-49-8] ^	0.33	U	ug/L	1	0.33	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
2-Hexanone [591-78-6] ^	0.50	U	ug/L	1	0.50	5.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
4-Chlorotoluene [106-43-4] ^	0.22	U	ug/L	1	0.22	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
4-Isopropyltoluene [99-87-6] ^	0.29	U	ug/L	1	0.29	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
4-Methyl-2-pentanone [108-10-1] ^	1.0	U	ug/L	1	1.0	5.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
Acetone [67-64-1] ^	1.1	U	ug/L	1	1.1	5.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
Benzene [71-43-2] ^	0.27	U	ug/L	1	0.27	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
Bromobenzene [108-86-1] ^	0.26	U	ug/L	1	0.26	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
Bromochloromethane [74-97-5] ^	0.28	U	ug/L	1	0.28	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
Bromodichloromethane [75-27-4] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
Bromform [75-25-2] ^	0.33	U	ug/L	1	0.33	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
Bromomethane [74-83-9] ^	0.64	U	ug/L	1	0.64	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
Carbon disulfide [75-15-0] ^	0.24	U	ug/L	1	0.24	5.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
Carbon tetrachloride [56-23-5] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
Chlorobenzene [108-90-7] ^	0.24	U	ug/L	1	0.24	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
Chloroethane [75-00-3] ^	0.31	U	ug/L	1	0.31	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
Chloroform [67-66-3] ^	0.21	U	ug/L	1	0.21	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
Chloromethane [74-87-3] ^	0.31	U	ug/L	1	0.31	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
cis-1,2-Dichloroethene [156-59-2] ^	0.22	U	ug/L	1	0.22	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
cis-1,3-Dichloropropene [10061-01-5] ^	0.35	U	ug/L	1	0.35	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
Dibromochloromethane [124-48-1] ^	0.27	U	ug/L	1	0.27	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
Dichlorodifluoromethane [75-71-8] ^	0.29	U	ug/L	1	0.29	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
Ethylbenzene [100-41-4] ^	0.26	U	ug/L	1	0.26	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
Hexachlorobutadiene [87-68-3] ^	0.35	U	ug/L	1	0.35	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
Isopropylbenzene [98-82-8] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
m,p-Xylenes [108-38-3/106-42-3] ^	0.50	U	ug/L	1	0.50	2.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
Methylene chloride [75-09-2] ^	0.62	U	ug/L	1	0.62	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	

**Description:** TRIP BLANK 4

**Lab Sample ID:** B102269-16

**Received:** 05/25/11 10:15

**Matrix:** Water

**Sampled:** 05/24/11 00:00

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Lab

**Volatile Organic Compounds by GCMS**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Methyl-tert-Butyl Ether [1634-04-4] ^	0.24	U	ug/L	1	0.24	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
Naphthalene [91-20-3] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
n-Butyl Benzene [104-51-8] ^	0.28	U	ug/L	1	0.28	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
n-Propyl Benzene [103-65-1] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
o-Xylene [95-47-6] ^	0.25	U	ug/L	1	0.25	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
sec-Butylbenzene [135-98-8] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
Styrene [100-42-5] ^	0.32	U	ug/L	1	0.32	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
tert-Butylbenzene [98-06-6] ^	0.21	U	ug/L	1	0.21	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
Tetrachloroethene [127-18-4] ^	0.21	U	ug/L	1	0.21	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
Toluene [108-88-3] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
trans-1,2-Dichloroethene [156-60-5] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
trans-1,3-Dichloropropene [10061-02-6] ^	0.33	U	ug/L	1	0.33	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
Trichloroethene [79-01-6] ^	0.24	U	ug/L	1	0.24	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
Trichlorofluoromethane [75-69-4] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
Vinyl chloride [75-01-4] ^	0.33	U	ug/L	1	0.33	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
Xylenes (Total) [1330-20-7] ^	0.50	U	ug/L	1	0.50	1.0	1E26018	EPA 8260B	05/27/11 22:47	GMB	
<hr/>											
<b>Surrogates</b>	<b>Results</b>	<b>DF</b>	<b>Spike Lvl</b>	<b>% Rec</b>	<b>% Rec Limits</b>		<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
4-Bromofluorobenzene	50	1	50.0	100 %	62-132		1E26018	EPA 8260B	05/27/11 22:47	GMB	
Dibromofluoromethane	53	1	50.0	105 %	73-134		1E26018	EPA 8260B	05/27/11 22:47	GMB	
Toluene-d8	58	1	50.0	116 %	66-138		1E26018	EPA 8260B	05/27/11 22:47	GMB	

**Description:** TRIP BLANK 5

**Lab Sample ID:** B102269-17

**Received:** 05/25/11 10:15

**Matrix:** Water

**Sampled:** 05/24/11 00:00

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Lab

**Volatile Organic Compounds by GCMS**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>POL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
1,1,1-Trichloroethane [71-55-6] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.32	U	ug/L	1	0.32	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
1,1,2-Trichloroethane [79-00-5] ^	0.40	U	ug/L	1	0.40	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
1,1-Dichloroethane [75-34-3] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
1,1-Dichloropropene [563-58-6] ^	0.21	U	ug/L	1	0.21	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
1,2,3-Trichlorobenzene [87-61-6] ^	0.50	U	ug/L	1	0.50	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
1,2,3-Trichloropropane [96-18-4] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
1,2,4-Trichlorobenzene [120-82-1] ^	0.41	U	ug/L	1	0.41	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
1,2,4-Trimethylbenzene [95-63-6] ^	0.28	U	ug/L	1	0.28	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.60	U	ug/L	1	0.60	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
1,2-Dibromoethane [106-93-4] ^	0.27	U	ug/L	1	0.27	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
1,2-Dichlorobenzene [95-50-1] ^	0.24	U	ug/L	1	0.24	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
1,2-Dichloroethane [107-06-2] ^	0.28	U	ug/L	1	0.28	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
1,2-Dichloropropane [78-87-5] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
1,3,5-Trimethylbenzene [108-67-8] ^	0.26	U	ug/L	1	0.26	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
1,3-Dichlorobenzene [541-73-1] ^	0.27	U	ug/L	1	0.27	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
1,3-Dichloropropane [142-28-9] ^	0.25	U	ug/L	1	0.25	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
1,4-Dichlorobenzene [106-46-7] ^	0.23	U	ug/L	1	0.23	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
2,2-Dichloropropane [594-20-7] ^	0.40	U	ug/L	1	0.40	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
2-Butanone [78-93-3] ^	0.38	U	ug/L	1	0.38	5.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
2-Chloroethyl Vinyl Ether [110-75-8] ^	1.5	U	ug/L	1	1.5	5.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
2-Chlorotoluene [95-49-8] ^	0.33	U	ug/L	1	0.33	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
2-Hexanone [591-78-6] ^	0.50	U	ug/L	1	0.50	5.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
4-Chlorotoluene [106-43-4] ^	0.22	U	ug/L	1	0.22	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
4-Isopropyltoluene [99-87-6] ^	0.29	U	ug/L	1	0.29	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
4-Methyl-2-pentanone [108-10-1] ^	1.0	U	ug/L	1	1.0	5.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
Acetone [67-64-1] ^	1.1	U	ug/L	1	1.1	5.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
Benzene [71-43-2] ^	0.27	U	ug/L	1	0.27	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
Bromobenzene [108-86-1] ^	0.26	U	ug/L	1	0.26	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
Bromochloromethane [74-97-5] ^	0.28	U	ug/L	1	0.28	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
Bromodichloromethane [75-27-4] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
Bromoform [75-25-2] ^	0.33	U	ug/L	1	0.33	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
Bromomethane [74-83-9] ^	0.64	U	ug/L	1	0.64	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
Carbon disulfide [75-15-0] ^	0.24	U	ug/L	1	0.24	5.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
Carbon tetrachloride [56-23-5] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
Chlorobenzene [108-90-7] ^	0.24	U	ug/L	1	0.24	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
Chloroethane [75-00-3] ^	0.31	U	ug/L	1	0.31	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
Chloroform [67-66-3] ^	0.21	U	ug/L	1	0.21	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
Chloromethane [74-87-3] ^	0.31	U	ug/L	1	0.31	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
cis-1,2-Dichloroethene [156-59-2] ^	0.22	U	ug/L	1	0.22	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
cis-1,3-Dichloropropene [10061-01-5] ^	0.35	U	ug/L	1	0.35	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
Dibromochloromethane [124-48-1] ^	0.27	U	ug/L	1	0.27	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
Dichlorodifluoromethane [75-71-8] ^	0.29	U	ug/L	1	0.29	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
Ethylbenzene [100-41-4] ^	0.26	U	ug/L	1	0.26	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
Hexachlorobutadiene [87-68-3] ^	0.35	U	ug/L	1	0.35	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
Isopropylbenzene [98-82-8] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
m,p-Xylenes [108-38-3/106-42-3] ^	0.50	U	ug/L	1	0.50	2.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
Methylene chloride [75-09-2] ^	0.62	U	ug/L	1	0.62	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	

**Description:** TRIP BLANK 5

**Lab Sample ID:** B102269-17

**Received:** 05/25/11 10:15

**Matrix:** Water

**Sampled:** 05/24/11 00:00

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Lab

### Volatile Organic Compounds by GCMS

<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	POL	Batch	Method	Analyzed	By	Notes
Methyl-tert-Butyl Ether [1634-04-4] ^	0.24	U	ug/L	1	0.24	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
Naphthalene [91-20-3] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
n-Butyl Benzene [104-51-8] ^	0.28	U	ug/L	1	0.28	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
n-Propyl Benzene [103-65-1] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
o-Xylene [95-47-6] ^	0.25	U	ug/L	1	0.25	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
sec-Butylbenzene [135-98-8] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
Styrene [100-42-5] ^	0.32	U	ug/L	1	0.32	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
tert-Butylbenzene [98-06-6] ^	0.21	U	ug/L	1	0.21	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
Tetrachloroethene [127-18-4] ^	0.21	U	ug/L	1	0.21	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
Toluene [108-88-3] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
trans-1,2-Dichloroethene [156-60-5] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
trans-1,3-Dichloropropene [10061-02-6] ^	0.33	U	ug/L	1	0.33	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
Trichloroethene [79-01-6] ^	0.24	U	ug/L	1	0.24	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
Trichlorofluoromethane [75-69-4] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
Vinyl chloride [75-01-4] ^	0.33	U	ug/L	1	0.33	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	
Xylenes (Total) [1330-20-7] ^	0.50	U	ug/L	1	0.50	1.0	1E26018	EPA 8260B	05/27/11 23:21	GMB	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
4-Bromofluorobenzene	50	1	50.0	100 %	62-132	1E26018	EPA 8260B	05/27/11 23:21	GMB	
Dibromofluoromethane	53	1	50.0	105 %	73-134	1E26018	EPA 8260B	05/27/11 23:21	GMB	
Toluene-d8	58	1	50.0	116 %	66-138	1E26018	EPA 8260B	05/27/11 23:21	GMB	



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**Description:** TRIP BLANK 6**Lab Sample ID:** B102269-18**Received:** 05/25/11 10:15**Matrix:** Water**Sampled:** 05/24/11 00:00**Work Order:** B102269**Project:** Cooper Tools**Sampled By:** Lab**Volatile Organic Compounds by GCMS**<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
1,1,1-Trichloroethane [71-55-6] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.32	U	ug/L	1	0.32	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
1,1,2-Trichloroethane [79-00-5] ^	0.40	U	ug/L	1	0.40	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
1,1-Dichloroethane [75-34-3] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
1,1-Dichloropropene [563-58-6] ^	0.21	U	ug/L	1	0.21	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
1,2,3-Trichlorobenzene [87-61-6] ^	0.50	U	ug/L	1	0.50	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
1,2,3-Trichloropropane [96-18-4] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
1,2,4-Trichlorobenzene [120-82-1] ^	0.41	U	ug/L	1	0.41	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
1,2,4-Trimethylbenzene [95-63-6] ^	0.28	U	ug/L	1	0.28	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.60	U	ug/L	1	0.60	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
1,2-Dibromoethane [106-93-4] ^	0.27	U	ug/L	1	0.27	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
1,2-Dichlorobenzene [95-50-1] ^	0.24	U	ug/L	1	0.24	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
1,2-Dichloroethane [107-06-2] ^	0.28	U	ug/L	1	0.28	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
1,2-Dichloropropane [78-87-5] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
1,3,5-Trimethylbenzene [108-67-8] ^	0.26	U	ug/L	1	0.26	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
1,3-Dichlorobenzene [541-73-1] ^	0.27	U	ug/L	1	0.27	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
1,3-Dichloropropane [142-28-9] ^	0.25	U	ug/L	1	0.25	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
1,4-Dichlorobenzene [106-46-7] ^	0.23	U	ug/L	1	0.23	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
2,2-Dichloropropane [594-20-7] ^	0.40	U	ug/L	1	0.40	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
2-Butanone [78-93-3] ^	0.38	U	ug/L	1	0.38	5.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
2-Chloroethyl Vinyl Ether [110-75-8] ^	1.5	U	ug/L	1	1.5	5.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
2-Chlorotoluene [95-49-8] ^	0.33	U	ug/L	1	0.33	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
2-Hexanone [591-78-6] ^	0.50	U	ug/L	1	0.50	5.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
4-Chlorotoluene [106-43-4] ^	0.22	U	ug/L	1	0.22	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
4-Isopropyltoluene [99-87-6] ^	0.29	U	ug/L	1	0.29	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
4-Methyl-2-pentanone [108-10-1] ^	1.0	U	ug/L	1	1.0	5.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
Acetone [67-64-1] ^	1.1	U	ug/L	1	1.1	5.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
Benzene [71-43-2] ^	0.27	U	ug/L	1	0.27	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
Bromobenzene [108-86-1] ^	0.26	U	ug/L	1	0.26	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
Bromochloromethane [74-97-5] ^	0.28	U	ug/L	1	0.28	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
Bromodichloromethane [75-27-4] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
Bromoform [75-25-2] ^	0.33	U	ug/L	1	0.33	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
Bromomethane [74-83-9] ^	0.64	U	ug/L	1	0.64	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
Carbon disulfide [75-15-0] ^	0.24	U	ug/L	1	0.24	5.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
Carbon tetrachloride [56-23-5] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
Chlorobenzene [108-90-7] ^	0.24	U	ug/L	1	0.24	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
Chloroethane [75-00-3] ^	0.31	U	ug/L	1	0.31	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
Chloroform [67-66-3] ^	0.21	U	ug/L	1	0.21	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
Chloromethane [74-87-3] ^	0.31	U	ug/L	1	0.31	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
cis-1,2-Dichloroethene [156-59-2] ^	0.22	U	ug/L	1	0.22	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
cis-1,3-Dichloropropene [10061-01-5] ^	0.35	U	ug/L	1	0.35	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
Dibromochloromethane [124-48-1] ^	0.27	U	ug/L	1	0.27	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
Dichlorodifluoromethane [75-71-8] ^	0.29	U	ug/L	1	0.29	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
Ethylbenzene [100-41-4] ^	0.26	U	ug/L	1	0.26	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
Hexachlorobutadiene [87-68-3] ^	0.35	U	ug/L	1	0.35	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
Isopropylbenzene [98-82-8] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
m,p-Xylenes [108-38-3/106-42-3] ^	0.50	U	ug/L	1	0.50	2.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
Methylene chloride [75-09-2] ^	0.62	U	ug/L	1	0.62	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	

**Description:** TRIP BLANK 6

**Lab Sample ID:** B102269-18

**Received:** 05/25/11 10:15

**Matrix:** Water

**Sampled:** 05/24/11 00:00

**Work Order:** B102269

**Project:** Cooper Tools

**Sampled By:** Lab

**Volatile Organic Compounds by GCMS**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Methyl-tert-Butyl Ether [1634-04-4] ^	0.24	U	ug/L	1	0.24	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
Naphthalene [91-20-3] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
n-Butyl Benzene [104-51-8] ^	0.28	U	ug/L	1	0.28	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
n-Propyl Benzene [103-65-1] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
o-Xylene [95-47-6] ^	0.25	U	ug/L	1	0.25	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
sec-Butylbenzene [135-98-8] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
Styrene [100-42-5] ^	0.32	U	ug/L	1	0.32	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
tert-Butylbenzene [98-06-6] ^	0.21	U	ug/L	1	0.21	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
Tetrachloroethene [127-18-4] ^	0.21	U	ug/L	1	0.21	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
Toluene [108-88-3] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
trans-1,2-Dichloroethene [156-60-5] ^	0.30	U	ug/L	1	0.30	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
trans-1,3-Dichloropropene [10061-02-6] ^	0.33	U	ug/L	1	0.33	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
Trichloroethene [79-01-6] ^	0.24	U	ug/L	1	0.24	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
Trichlorofluoromethane [75-69-4] ^	0.20	U	ug/L	1	0.20	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
Vinyl chloride [75-01-4] ^	0.33	U	ug/L	1	0.33	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
Xylenes (Total) [1330-20-7] ^	0.50	U	ug/L	1	0.50	1.0	1E26018	EPA 8260B	05/27/11 23:56	GMB	
<b>Surrogates</b>											
4-Bromofluorobenzene	50	I	50.0	100 %	62-132		1E26018	EPA 8260B	05/27/11 23:56	GMB	
Dibromofluoromethane	52	I	50.0	104 %	73-134		1E26018	EPA 8260B	05/27/11 23:56	GMB	
Toluene-d8	58	I	50.0	116 %	66-138		1E26018	EPA 8260B	05/27/11 23:56	GMB	

### QUALITY CONTROL

**Gasoline Range Organics by GC - Quality Control**

Batch 1E31012 - EPA 5030B

**Blank (1E31012-BLK1)**

Prepared: 05/31/2011 10:38 Analyzed: 05/31/2011 13:55

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
GRO (C6-C10)	0.011	U	0.055	mg/L							
Surrogate: 2,5-Dibromotoluene	0.0901			mg/L	0.100		90	70-130			

**LCS (1E31012-BS1)**

Prepared: 05/31/2011 10:38 Analyzed: 05/31/2011 14:26

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
GRO (C6-C10)	0.549		0.055	mg/L	0.500		110	58-152			
Surrogate: 2,5-Dibromotoluene	0.0925			mg/L	0.100		92	70-130			

**Matrix Spike (1E31012-MS1)**

Prepared: 05/31/2011 10:38 Analyzed: 05/31/2011 22:21

Source: B102269-12

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
GRO (C6-C10)	0.492		0.055	mg/L	0.500	0.011 U	98	20-185			
Surrogate: 2,5-Dibromotoluene	0.0811			mg/L	0.100		81	70-130			

**Matrix Spike Dup (1E31012-MSD1)**

Prepared: 05/31/2011 10:38 Analyzed: 05/31/2011 22:53

Source: B102269-12

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
GRO (C6-C10)	0.554		0.055	mg/L	0.500	0.011 U	111	20-185	12	26	
Surrogate: 2,5-Dibromotoluene	0.0782			mg/L	0.100		78	70-130			

### QUALITY CONTROL

**Volatile Organic Compounds by GCMS - Quality Control**

Batch 1E26018 - EPA 5030B\_MS

**Blank (1E26018-BLK1)**

Prepared: 05/26/2011 18:38 Analyzed: 05/27/2011 06:03

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1,2-Tetrachloroethane	0.20	U	1.0	ug/L							
1,1,1-Trichloroethane	0.20	U	1.0	ug/L							
1,1,2,2-Tetrachloroethane	0.32	U	1.0	ug/L							
1,1,2-Trichloroethane	0.40	U	1.0	ug/L							
1,1-Dichloroethane	0.30	U	1.0	ug/L							
1,1-Dichloroethene	0.21	U	1.0	ug/L							
1,1-Dichloropropene	0.21	U	1.0	ug/L							
1,2,3-Trichlorobenzene	0.50	U	1.0	ug/L							
1,2,3-Trichloropropane	0.30	U	1.0	ug/L							
1,2,4-Trichlorobenzene	0.41	U	1.0	ug/L							
1,2,4-Trimethylbenzene	0.28	U	1.0	ug/L							
1,2-Dibromo-3-chloropropane	0.60	U	1.0	ug/L							
1,2-Dibromoethane	0.27	U	1.0	ug/L							
1,2-Dichlorobenzene	0.24	U	1.0	ug/L							
1,2-Dichloroethane	0.28	U	1.0	ug/L							

### QUALITY CONTROL

**Volatile Organic Compounds by GCMS - Quality Control**

Batch 1E26018 - EPA 5030B\_MS

Blank (1E26018-BLK1) Continued

Prepared: 05/26/2011 18:38 Analyzed: 05/27/2011 06:03

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,2-Dichloropropane	0.30	U	1.0	ug/L							
1,3,5-Trimethylbenzene	0.26	U	1.0	ug/L							
1,3-Dichlorobenzene	0.27	U	1.0	ug/L							
1,3-Dichloropropane	0.25	U	1.0	ug/L							
1,4-Dichlorobenzene	0.23	U	1.0	ug/L							
2,2-Dichloropropane	0.40	U	1.0	ug/L							
2-Butanone	0.38	U	5.0	ug/L							
2-Chloroethyl Vinyl Ether	1.5	U	5.0	ug/L							
2-Chlorotoluene	0.33	U	1.0	ug/L							
2-Hexanone	0.50	U	5.0	ug/L							
4-Chlorotoluene	0.22	U	1.0	ug/L							
4-Isopropyltoluene	0.29	U	1.0	ug/L							
4-Methyl-2-pentanone	1.0	U	5.0	ug/L							
<b>Acetone</b>	<b>13</b>		5.0	ug/L							0-01
Benzene	0.27	U	1.0	ug/L							
Bromobenzene	0.26	U	1.0	ug/L							
Bromochloromethane	0.28	U	1.0	ug/L							
Bromodichloromethane	0.20	U	1.0	ug/L							
Bromoform	0.33	U	1.0	ug/L							
Bromomethane	0.64	U	1.0	ug/L							
<b>Carbon disulfide</b>	<b>0.49</b>	<b>I</b>	5.0	ug/L							
Carbon tetrachloride	0.20	U	1.0	ug/L							
Chlorobenzene	0.24	U	1.0	ug/L							
Chloroethane	0.31	U	1.0	ug/L							
Chloroform	0.21	U	1.0	ug/L							
Chloromethane	0.31	U	1.0	ug/L							
cis-1,2-Dichloroethene	0.22	U	1.0	ug/L							
cis-1,3-Dichloropropene	0.35	U	1.0	ug/L							
Dibromochloromethane	0.27	U	1.0	ug/L							
Dibromomethane	0.27	U	1.0	ug/L							
Dichlorodifluoromethane	0.29	U	1.0	ug/L							
Ethylbenzene	0.26	U	1.0	ug/L							
Hexachlorobutadiene	0.35	U	1.0	ug/L							
Isopropylbenzene	0.20	U	1.0	ug/L							
m,p-Xylenes	0.50	U	2.0	ug/L							
<b>Methylene chloride</b>	<b>3.0</b>		1.0	ug/L							0-01
Methyl-tert-Butyl Ether	0.24	U	1.0	ug/L							
Naphthalene	0.30	U	1.0	ug/L							
n-Butyl Benzene	0.28	U	1.0	ug/L							
n-Propyl Benzene	0.20	U	1.0	ug/L							
o-Xylene	0.25	U	1.0	ug/L							
sec-Butylbenzene	0.20	U	1.0	ug/L							
Styrene	0.32	U	1.0	ug/L							
tert-Butylbenzene	0.21	U	1.0	ug/L							
Tetrachloroethene	0.21	U	1.0	ug/L							
Toluene	0.30	U	1.0	ug/L							
trans-1,2-Dichloroethene	0.30	U	1.0	ug/L							
trans-1,3-Dichloropropene	0.33	U	1.0	ug/L							
Trichloroethene	0.24	U	1.0	ug/L							

### QUALITY CONTROL

**Volatile Organic Compounds by GCMS - Quality Control**

Batch 1E26018 - EPA 5030B\_MS

**Blank (1E26018-BLK1) Continued**

Prepared: 05/26/2011 18:38 Analyzed: 05/27/2011 06:03

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Trichlorofluoromethane	0.20	U	1.0	ug/L							
Vinyl chloride	0.33	U	1.0	ug/L							
Xylenes (Total)	0.50	U	1.0	ug/L							
Surrogate: 4-Bromofluorobenzene	50			ug/L	50.0		100	62-132			
Surrogate: Dibromofluoromethane	53			ug/L	50.0		107	73-134			
Surrogate: Toluene-d8	57			ug/L	50.0		114	66-138			

**LCS (1E26018-BS1)**

Prepared: 05/26/2011 18:38 Analyzed: 05/27/2011 06:37

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	27		1.0	ug/L	20.0		137	51-145			
Benzene	23		1.0	ug/L	20.0		114	76-120			
Chlorobenzene	21		1.0	ug/L	20.0		104	80-124			
Toluene	19		1.0	ug/L	20.0		97	78-120			
Trichloroethene	23		1.0	ug/L	20.0		113	80-120			
Surrogate: 4-Bromofluorobenzene	52			ug/L	50.0		104	62-132			
Surrogate: Dibromofluoromethane	53			ug/L	50.0		106	73-134			
Surrogate: Toluene-d8	57			ug/L	50.0		114	66-138			

**Matrix Spike (1E26018-MS1)**

Prepared: 05/26/2011 18:38 Analyzed: 05/27/2011 07:12

Source: B102269-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	110		1.0	ug/L	20.0	100	40	51-145			
Benzene	23		1.0	ug/L	20.0	0.27 U	115	76-120			
Chlorobenzene	20		1.0	ug/L	20.0	0.24 U	102	80-124			
Toluene	19		1.0	ug/L	20.0	0.30 U	96	78-120			
Trichloroethene	23		1.0	ug/L	20.0	1.0	109	80-120			
Surrogate: 4-Bromofluorobenzene	520			ug/L	500		104	62-132			
Surrogate: Dibromofluoromethane	520			ug/L	500		103	73-134			
Surrogate: Toluene-d8	570			ug/L	500		114	66-138			

**Matrix Spike Dup (1E26018-MSD1)**

Prepared: 05/26/2011 18:38 Analyzed: 05/27/2011 07:47

Source: B102269-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	120		1.0	ug/L	20.0	100	68	51-145	5	16	
Benzene	23		1.0	ug/L	20.0	0.27 U	113	76-120	2	17	
Chlorobenzene	20		1.0	ug/L	20.0	0.24 U	101	80-124	1	19	
Toluene	19		1.0	ug/L	20.0	0.30 U	94	78-120	2	24	
Trichloroethene	23		1.0	ug/L	20.0	1.0	108	80-120	1	18	
Surrogate: 4-Bromofluorobenzene	530			ug/L	500		106	62-132			
Surrogate: Dibromofluoromethane	550			ug/L	500		110	73-134			
Surrogate: Toluene-d8	570			ug/L	500		113	66-138			

Batch 1E31015 - EPA 5030B\_MS

### QUALITY CONTROL

**Volatile Organic Compounds by GCMS - Quality Control**

Blank (1E31015-BLK1)

Prepared: 05/31/2011 11:25 Analyzed: 05/31/2011 11:58

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1,2-Tetrachloroethane	0.20	U	1.0	ug/L							
1,1,1-Trichloroethane	0.20	U	1.0	ug/L							
1,1,2,2-Tetrachloroethane	0.32	U	1.0	ug/L							
1,1,2-Trichloroethane	0.40	U	1.0	ug/L							
1,1-Dichloroethane	0.30	U	1.0	ug/L							
1,1-Dichloroethene	0.21	U	1.0	ug/L							
1,1-Dichloropropene	0.21	U	1.0	ug/L							
1,2,3-Trichlorobenzene	0.50	U	1.0	ug/L							
1,2,3-Trichloropropane	0.30	U	1.0	ug/L							
1,2,4-Trichlorobenzene	0.41	U	1.0	ug/L							
1,2,4-Trimethylbenzene	0.28	U	1.0	ug/L							
1,2-Dibromo-3-chloropropane	0.60	U	1.0	ug/L							
1,2-Dibromoethane	0.27	U	1.0	ug/L							
1,2-Dichlorobenzene	0.24	U	1.0	ug/L							
1,2-Dichloroethane	0.28	U	1.0	ug/L							
1,2-Dichloropropane	0.30	U	1.0	ug/L							
1,3,5-Trimethylbenzene	0.26	U	1.0	ug/L							
1,3-Dichlorobenzene	0.27	U	1.0	ug/L							
1,3-Dichloropropane	0.25	U	1.0	ug/L							
1,4-Dichlorobenzene	0.23	U	1.0	ug/L							
2,2-Dichloropropane	0.40	U	1.0	ug/L							
2-Butanone	0.38	U	5.0	ug/L							
2-Chloroethyl Vinyl Ether	1.5	U	5.0	ug/L							
2-Chlorotoluene	0.33	U	1.0	ug/L							
2-Hexanone	0.50	U	5.0	ug/L							
4-Chlorotoluene	0.22	U	1.0	ug/L							
4-Isopropyltoluene	0.29	U	1.0	ug/L							
4-Methyl-2-pentanone	1.0	U	5.0	ug/L							
Acetone	1.1	U	5.0	ug/L							
Benzene	0.27	U	1.0	ug/L							
Bromobenzene	0.26	U	1.0	ug/L							
Bromochloromethane	0.28	U	1.0	ug/L							
Bromodichloromethane	0.20	U	1.0	ug/L							
Bromoform	0.33	U	1.0	ug/L							
Bromomethane	0.64	U	1.0	ug/L							
Carbon disulfide	0.24	U	5.0	ug/L							
Carbon tetrachloride	0.20	U	1.0	ug/L							
Chlorobenzene	0.24	U	1.0	ug/L							
Chloroethane	0.31	U	1.0	ug/L							
Chloroform	0.21	U	1.0	ug/L							
Chloromethane	0.31	U	1.0	ug/L							
cis-1,2-Dichloroethene	0.22	U	1.0	ug/L							
cis-1,3-Dichloropropene	0.35	U	1.0	ug/L							
Dibromochloromethane	0.27	U	1.0	ug/L							
Dibromomethane	0.27	U	1.0	ug/L							
Dichlorodifluoromethane	0.29	U	1.0	ug/L							
Ethylbenzene	0.26	U	1.0	ug/L							
Hexachlorobutadiene	0.35	U	1.0	ug/L							
Isopropylbenzene	0.20	U	1.0	ug/L							
m,p-Xylenes	0.50	U	2.0	ug/L							

### QUALITY CONTROL

**Volatile Organic Compounds by GCMS - Quality Control**

Batch 1E31015 - EPA 5030B\_MS

**Blank (1E31015-BLK1) Continued**

Prepared: 05/31/2011 11:25 Analyzed: 05/31/2011 11:58

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Methylene chloride	0.62	U	1.0	ug/L							
Methyl-tert-Butyl Ether	0.24	U	1.0	ug/L							
Naphthalene	0.30	U	1.0	ug/L							
n-Butyl Benzene	0.28	U	1.0	ug/L							
n-Propyl Benzene	0.20	U	1.0	ug/L							
o-Xylene	0.25	U	1.0	ug/L							
sec-Butylbenzene	0.20	U	1.0	ug/L							
Styrene	0.32	U	1.0	ug/L							
tert-Butylbenzene	0.21	U	1.0	ug/L							
Tetrachloroethene	0.21	U	1.0	ug/L							
Toluene	0.30	U	1.0	ug/L							
trans-1,2-Dichloroethene	0.30	U	1.0	ug/L							
trans-1,3-Dichloropropene	0.33	U	1.0	ug/L							
Trichloroethene	0.24	U	1.0	ug/L							
Trichlorofluoromethane	0.20	U	1.0	ug/L							
Vinyl chloride	0.33	U	1.0	ug/L							
Xylenes (Total)	0.50	U	1.0	ug/L							
<i>Surrogate: 4-Bromofluorobenzene</i>	52			ug/L	50.0		104	62-132			
<i>Surrogate: Dibromofluoromethane</i>	54			ug/L	50.0		109	73-134			
<i>Surrogate: Toluene-d8</i>	58			ug/L	50.0		116	66-138			

**LCS (1E31015-BS1)**

Prepared: 05/31/2011 11:25 Analyzed: 05/31/2011 13:41

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	26		1.0	ug/L	20.0		132	51-145			
Benzene	24		1.0	ug/L	20.0		119	76-120			
Chlorobenzene	20		1.0	ug/L	20.0		101	80-124			
Toluene	19		1.0	ug/L	20.0		97	78-120			
Trichloroethene	23		1.0	ug/L	20.0		116	80-120			
<i>Surrogate: 4-Bromofluorobenzene</i>	53			ug/L	50.0		105	62-132			
<i>Surrogate: Dibromofluoromethane</i>	54			ug/L	50.0		107	73-134			
<i>Surrogate: Toluene-d8</i>	58			ug/L	50.0		117	66-138			

**Matrix Spike (1E31015-MS1)**

Prepared: 05/31/2011 11:25 Analyzed: 05/31/2011 14:16

Source: B102448-01RE1

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	27		1.0	ug/L	20.0	0.21 U	137	51-145			
Benzene	24		1.0	ug/L	20.0	0.27 U	119	76-120			
Chlorobenzene	21		1.0	ug/L	20.0	0.24 U	106	80-124			
Toluene	20		1.0	ug/L	20.0	0.30 U	99	78-120			
Trichloroethene	24		1.0	ug/L	20.0	0.24 U	118	80-120			
<i>Surrogate: 4-Bromofluorobenzene</i>	520			ug/L	500		105	62-132			
<i>Surrogate: Dibromofluoromethane</i>	570			ug/L	500		114	73-134			
<i>Surrogate: Toluene-d8</i>	580			ug/L	500		115	66-138			

**Matrix Spike Dup (1E31015-MSD1)**

Prepared: 05/31/2011 11:25 Analyzed: 05/31/2011 14:51

### QUALITY CONTROL

#### **Volatile Organic Compounds by GCMS - Quality Control**

Batch 1E31015 - EPA 5030B\_MS

##### Matrix Spike Dup (1E31015-MSD1) Continued

Prepared: 05/31/2011 11:25 Analyzed: 05/31/2011 14:51

Source: B102448-01RE1

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	27		1.0	ug/L	20.0	0.21 U	137	51-145	0.07	16	
Benzene	24		1.0	ug/L	20.0	0.27 U	122	76-120	2	17	QM-07
Chlorobenzene	21		1.0	ug/L	20.0	0.24 U	106	80-124	0.4	19	
Toluene	20		1.0	ug/L	20.0	0.30 U	99	78-120	0.5	24	
Trichloroethene	24		1.0	ug/L	20.0	0.24 U	119	80-120	1	18	
<i>Surrogate: 4-Bromo Fluorobenzene</i>	<i>520</i>			<i>ug/L</i>	<i>500</i>		<i>105</i>	<i>62-132</i>			
<i>Surrogate: Dibromo Fluoromethane</i>	<i>580</i>			<i>ug/L</i>	<i>500</i>		<i>115</i>	<i>73-134</i>			
<i>Surrogate: Toluene-d8</i>	<i>580</i>			<i>ug/L</i>	<i>500</i>		<i>116</i>	<i>66-138</i>			

#### **Non-Halogenated Volatile Organics by GC - Quality Control**

Batch 1E31002 - NO PREP ANALYTIX

##### Blank (1E31002-BLK1)

Prepared: 05/31/2011 10:00 Analyzed: 05/31/2011 12:01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Ethylene Glycol	4.1	U	10	mg/L							
Propylene Glycol	1.8	U	10	mg/L							
<i>Surrogate: 1,3-Butylene Glycol</i>	<i>100</i>			<i>mg/L</i>	<i>101</i>		<i>101</i>	<i>50-150</i>			

##### LCS (1E31002-BS1)

Prepared: 05/31/2011 10:00 Analyzed: 05/31/2011 12:12

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Ethylene Glycol	99		10	mg/L	100		98.6	70-130			
Propylene Glycol	97		10	mg/L	99.5		97.5	70-130			
<i>Surrogate: 1,3-Butylene Glycol</i>	<i>100</i>			<i>mg/L</i>	<i>101</i>		<i>99.3</i>	<i>50-150</i>			

##### Matrix Spike (1E31002-MS1)

Prepared: 05/31/2011 10:00 Analyzed: 05/31/2011 12:23

Source: B102269-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Ethylene Glycol	95		10	mg/L	100	4.1 U	94.8	70-130			
Propylene Glycol	95		10	mg/L	99.5	1.8 U	95.8	70-130			
<i>Surrogate: 1,3-Butylene Glycol</i>	<i>98</i>			<i>mg/L</i>	<i>101</i>		<i>96.8</i>	<i>50-150</i>			

##### Matrix Spike Dup (1E31002-MSD1)

Prepared: 05/31/2011 10:00 Analyzed: 05/31/2011 12:34

Source: B102269-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Ethylene Glycol	98		10	mg/L	100	4.1 U	97.7	70-130	3.02	25	
Propylene Glycol	97		10	mg/L	99.5	1.8 U	97.1	70-130	1.41	25	
<i>Surrogate: 1,3-Butylene Glycol</i>	<i>99</i>			<i>mg/L</i>	<i>101</i>		<i>97.9</i>	<i>50-150</i>			

#### **Diesel Range Organics by GC - Quality Control**

## QUALITY CONTROL

### Diesel Range Organics by GC - Quality Control

Batch 1E25012 - EPA 3510C

#### Blank (1E25012-BLK1)

Prepared: 05/25/2011 13:00 Analyzed: 05/25/2011 18:42

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
DRO (C10-C28)	0.024	U	0.10	mg/L							
Surrogate: o-Terphenyl	0.051			mg/L	0.0500		103	63-139			

#### LCS (1E25012-BS1)

Prepared: 05/25/2011 13:00 Analyzed: 05/25/2011 19:06

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
DRO (C10-C28)	1.1		0.10	mg/L	1.00		109	44-133			
Surrogate: o-Terphenyl	0.049			mg/L	0.0500		97	63-139			

#### Matrix Spike (1E25012-MS1)

Prepared: 05/25/2011 13:00 Analyzed: 05/25/2011 19:30

Source: B102487-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
DRO (C10-C28)	0.75		0.10	mg/L	1.00	0.024 U	75	44-133			
Surrogate: o-Terphenyl	0.048			mg/L	0.0500		96	63-139			

#### Matrix Spike Dup (1E25012-MSD1)

Prepared: 05/25/2011 13:00 Analyzed: 05/25/2011 19:53

Source: B102487-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
DRO (C10-C28)	1.0		0.10	mg/L	1.00	0.024 U	100	44-133	29	30	
Surrogate: o-Terphenyl	0.050			mg/L	0.0500		100	63-139			

### Metals by EPA 6000/7000 Series Methods - Quality Control

Batch 1E31012 - EPA 7470A

#### Blank (1E31012-BLK1)

Prepared: 06/01/2011 13:00 Analyzed: 06/02/2011 12:46

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	0.0853	I	0.200	ug/L							

#### LCS (1E31012-BS1)

Prepared: 06/01/2011 13:00 Analyzed: 06/02/2011 13:02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	5.18		0.200	ug/L	5.00		104	85-115			

#### Matrix Spike (1E31012-MS1)

Prepared: 06/01/2011 13:00 Analyzed: 06/02/2011 13:04

Source: B102577-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	54.8		2.00	ug/L	50.0	0.918	108	85-115			

#### Matrix Spike Dup (1E31012-MSD1)

Prepared: 06/01/2011 13:00 Analyzed: 06/02/2011 13:06

Source: B102577-01

### QUALITY CONTROL

**Metals by EPA 6000/7000 Series Methods - Quality Control**

Batch 1E31012 - EPA 7470A

Matrix Spike Dup (1E31012-MSD1) Continued

Prepared: 06/01/2011 13:00 Analyzed: 06/02/2011 13:06

Source: B102577-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	56.2		2.00	ug/L	50.0	0.918	110	85-115	2	25	

**Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control**

Batch 1E27012 - EPA 3005A

Blank (1E27012-BLK1)

Prepared: 05/27/2011 09:42 Analyzed: 05/31/2011 12:35

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	6.70	U	10.0	ug/L							
Beryllium	0.100	U	1.00	ug/L							
Cadmium	0.370	U	1.00	ug/L							
Chromium	1.30	U	10.0	ug/L							
Copper	1.50	U	10.0	ug/L							
Lead	2.90	U	10.0	ug/L							
Nickel	1.10	U	10.0	ug/L							
Selenium	8.90	U	10.0	ug/L							
Silver	1.50	U	10.0	ug/L							
Zinc	3.50	U	10.0	ug/L							

LCS (1E27012-BS1)

Prepared: 05/27/2011 09:42 Analyzed: 05/31/2011 12:38

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	476		10.0	ug/L	500		95	85-115			
Beryllium	49.6		1.00	ug/L	50.0		99	85-115			
Cadmium	51.2		1.00	ug/L	50.0		102	85-115			
Chromium	495		10.0	ug/L	500		99	85-115			
Copper	499		10.0	ug/L	500		100	85-115			
Lead	493		10.0	ug/L	500		99	85-115			
Nickel	486		10.0	ug/L	500		97	85-115			
Selenium	483		10.0	ug/L	500		97	85-115			
Silver	98.1		10.0	ug/L	100		98	85-115			
Zinc	481		10.0	ug/L	500		96	85-115			

Matrix Spike (1E27012-MS1)

Prepared: 05/27/2011 09:42 Analyzed: 05/31/2011 12:40

Source: B102532-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	475		10.0	ug/L	500	12.2	92	80-120			
Beryllium	48.8		1.00	ug/L	50.0	0.137	97	80-120			
Cadmium	50.1		1.00	ug/L	50.0	0.384	99	80-120			
Chromium	484		10.0	ug/L	500	1.30 U	97	80-120			
Copper	482		10.0	ug/L	500	1.50 U	96	80-120			
Lead	481		10.0	ug/L	500	2.90 U	96	80-120			
Nickel	480		10.0	ug/L	500	3.68	95	80-120			
Selenium	449		10.0	ug/L	500	8.90 U	90	80-120			
Silver	97.3		10.0	ug/L	100	1.50 U	97	80-120			

### QUALITY CONTROL

**Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control**
*Batch 1E27012 - EPA 3005A*
**Matrix Spike (1E27012-MS1) Continued**

Prepared: 05/27/2011 09:42 Analyzed: 05/31/2011 12:40

Source: B102532-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Zinc	482		10.0	ug/L	500	15.6	93	80-120			

**Matrix Spike Dup (1E27012-MSD1)**

Prepared: 05/27/2011 09:42 Analyzed: 05/31/2011 12:42

Source: B102532-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	503		10.0	ug/L	500	12.2	98	80-120	6	30	
Beryllium	51.1		1.00	ug/L	50.0	0.137	102	80-120	5	30	
Cadmium	53.2		1.00	ug/L	50.0	0.384	106	80-120	6	30	
Chromium	507		10.0	ug/L	500	1.30 U	101	80-120	5	30	
Copper	507		10.0	ug/L	500	1.50 U	101	80-120	5	30	
Lead	508		10.0	ug/L	500	2.90 U	102	80-120	6	30	
Nickel	501		10.0	ug/L	500	3.68	99	80-120	4	30	
Selenium	478		10.0	ug/L	500	8.90 U	96	80-120	6	30	
Silver	102		10.0	ug/L	100	1.50 U	102	80-120	4	30	
Zinc	510		10.0	ug/L	500	15.6	99	80-120	6	30	

*Batch 1E27013 - EPA 3005A*
**Blank (1E27013-BLK1)**

Prepared: 05/27/2011 09:57 Analyzed: 05/31/2011 11:27

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	6.70	U	10.0	ug/L							
Cadmium	0.370	U	1.00	ug/L							
Chromium	1.30	U	10.0	ug/L							
Copper	1.50	U	10.0	ug/L							
Nickel	1.10	U	10.0	ug/L							
Selenium	8.90	U	10.0	ug/L							
Silver	1.50	U	10.0	ug/L							

**Blank (1E27013-BLK2)**

Prepared: 05/27/2011 09:57 Analyzed: 05/31/2011 13:35

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Beryllium	0.100	U	1.00	ug/L							
Lead	2.90	U	10.0	ug/L							
Zinc	3.50	U	10.0	ug/L							

**LCS (1E27013-BS1)**

Prepared: 05/27/2011 09:57 Analyzed: 05/31/2011 11:30

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	473		10.0	ug/L	500		95	85-115			
Beryllium	49.2		1.00	ug/L	50.0		98	85-115			
Cadmium	50.4		1.00	ug/L	50.0		101	85-115			
Chromium	489		10.0	ug/L	500		98	85-115			
Copper	494		10.0	ug/L	500		99	85-115			
Lead	489		10.0	ug/L	500		98	85-115			

### QUALITY CONTROL

#### Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control

Batch 1E27013 - EPA 3005A

##### LCS (1E27013-BS1) Continued

Prepared: 05/27/2011 09:57 Analyzed: 05/31/2011 11:30

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Nickel	479		10.0	ug/L	500		96	85-115			
Selenium	475		10.0	ug/L	500		95	85-115			
Silver	102		10.0	ug/L	100		102	85-115			
Zinc	480		10.0	ug/L	500		96	85-115			

##### Matrix Spike (1E27013-MS1)

Prepared: 05/27/2011 09:57 Analyzed: 05/31/2011 11:32

Source: B102556-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	476		10.0	ug/L	500	6.70 U	95	80-120			
Beryllium	49.4		1.00	ug/L	50.0	0.137	98	80-120			
Cadmium	50.0		1.00	ug/L	50.0	0.370 U	100	80-120			
Chromium	489		10.0	ug/L	500	1.30 U	98	80-120			
Copper	495		10.0	ug/L	500	1.50 U	99	80-120			
Lead	485		10.0	ug/L	500	2.90 U	97	80-120			
Nickel	479		10.0	ug/L	500	1.10 U	96	80-120			
Selenium	474		10.0	ug/L	500	8.90 U	95	80-120			
Silver	99.8		10.0	ug/L	100	1.50 U	100	80-120			
Zinc	480		10.0	ug/L	500	3.50 U	96	80-120			

##### Matrix Spike Dup (1E27013-MSD1)

Prepared: 05/27/2011 09:57 Analyzed: 05/31/2011 11:34

Source: B102556-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	478		10.0	ug/L	500	6.70 U	96	80-120	0.5	30	
Beryllium	49.9		1.00	ug/L	50.0	0.137	100	80-120	1	30	
Cadmium	50.4		1.00	ug/L	50.0	0.370 U	101	80-120	0.8	30	
Chromium	494		10.0	ug/L	500	1.30 U	99	80-120	1	30	
Copper	501		10.0	ug/L	500	1.50 U	100	80-120	1	30	
Lead	490		10.0	ug/L	500	2.90 U	98	80-120	1	30	
Nickel	481		10.0	ug/L	500	1.10 U	96	80-120	0.4	30	
Selenium	473		10.0	ug/L	500	8.90 U	95	80-120	0.3	30	
Silver	101		10.0	ug/L	100	1.50 U	101	80-120	2	30	
Zinc	486		10.0	ug/L	500	3.50 U	97	80-120	1	30	

#### Classical Chemistry Parameters - Quality Control

Batch 1E25010 - Same

##### Blank (1E25010-BLK1)

Prepared: 05/25/2011 12:05 Analyzed: 05/25/2011 13:05

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Hexavalent Chromium	0.004	U	0.030	mg/L							

##### LCS (1E25010-BS1)

Prepared: 05/25/2011 12:05 Analyzed: 05/25/2011 13:05

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Hexavalent Chromium	0.26		0.030	mg/L	0.250		104	80-125			

**QUALITY CONTROL****Classical Chemistry Parameters - Quality Control**

Batch 1E25010 - Same

**Matrix Spike (1E25010-MS1)**

Prepared: 05/25/2011 12:05 Analyzed: 05/25/2011 13:05

Source: B102269-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Hexavalent Chromium	0.24		0.030	mg/L	0.250	0.004 U	97	80-120			

**Matrix Spike Dup (1E25010-MSD1)**

Prepared: 05/25/2011 12:05 Analyzed: 05/25/2011 13:05

Source: B102269-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Hexavalent Chromium	0.24		0.030	mg/L	0.250	0.004 U	97	80-120	0.2	25	

Batch 1E26006 - EPA 1664A

**Blank (1E26006-BLK1)**

Prepared: 05/26/2011 11:27 Analyzed: 05/31/2011 09:08

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Oil & Grease (HEM)	3.00	U	5.00	mg/L							

**LCS (1E26006-BS1)**

Prepared: 05/26/2011 11:27 Analyzed: 05/31/2011 09:08

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Oil & Grease (HEM)	36.9		5.00	mg/L	41.1		90	78-114			

**Matrix Spike (1E26006-MS1)**

Prepared: 05/26/2011 11:27 Analyzed: 05/31/2011 09:08

Source: B102487-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Oil & Grease (HEM)	39.2		5.00	mg/L	41.0	3.00 U	96	78-114			

**Matrix Spike Dup (1E26006-MSD1)**

Prepared: 05/26/2011 11:27 Analyzed: 05/31/2011 09:08

Source: B102487-02

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Oil & Grease (HEM)	38.4		5.00	mg/L	40.7	3.00 U	94	78-114	2	18	

**QUALITY CONTROL****Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control**

Batch 1E26014 - EPA 3005A

**Blank (1E26014-BLK1)**

Prepared: 05/26/2011 10:21 Analyzed: 05/27/2011 23:16

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	0.950	U	20.0	ug/L							
Thallium	0.410	U	1.00	ug/L							

**LCS (1E26014-BS1)**

Prepared: 05/26/2011 10:21 Analyzed: 05/27/2011 23:23

### QUALITY CONTROL

**Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control**

Batch 1E26014 - EPA 3005A

**LCS (1E26014-BS1) Continued**

Prepared: 05/26/2011 10:21 Analyzed: 05/27/2011 23:23

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	50.5		20.0	ug/L	50.0		101	80-120			
Thallium	51.9		1.00	ug/L	50.0		104	80-120			

**Matrix Spike (1E26014-MS1)**

Prepared: 05/26/2011 10:21 Analyzed: 05/27/2011 23:39

Source: B102269-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	48.9		20.0	ug/L	50.0	0.950 U	98	80-120			
Thallium	51.9		1.00	ug/L	50.0	0.410 U	104	80-120			

**Matrix Spike Dup (1E26014-MSD1)**

Prepared: 05/26/2011 10:21 Analyzed: 05/27/2011 23:48

Source: B102269-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	50.3		20.0	ug/L	50.0	0.950 U	101	80-120	3	20	
Thallium	51.6		1.00	ug/L	50.0	0.410 U	103	80-120	0.6	20	

**Post Spike (1E26014-PS1)**

Prepared: 05/27/2011 12:00 Analyzed: 05/27/2011 23:56

Source: B102269-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	5.09		2.00	ug/L	4.90	0.0330	103	75-125			
Thallium	5.11		0.100	ug/L	4.90	0.00569	104	75-125			

**FLAGS/NOTES AND DEFINITIONS**

PQL	PQL: Practical Quantitation Limit.
B	Results are based upon membrane filter colony counts that are outside the method indicated ideal range.
I	The reported value is between the laboratory method detection limit (MDL) and the practical quantitation limit (PQL).
J	Estimated value.
K	Off-scale low; Actual value is known to be less than the value given.
L	Off-scale high; Actual value is known to be greater than value given.
M	Presence of analyte is verified but not quantified; the actual value is less than the MRL but greater than the MDL.
N	Presumptive evidence of presence of material.
O	Sampled, but analysis lost or not performed.
Q	Sample exceeded the accepted holding time.
T	Value reported is less than the laboratory method detection limit. The value is reported for informational purposes only and shall not be used in statistical analysis.
U	Indicates that the compound was analyzed for but not detected.
V	Indicates that the analyte was detected in both the sample and the associated method blank.
Y	The laboratory analysis was from an improperly preserved sample. The data may not be accurate.
Z	Too many colonies were present (TNTC); the numeric value represents the filtration volume.
?	Data are rejected and should not be used. Some or all of the quality control data for the analyte were outside criteria, and the presence or absence of the analyte cannot be determined from the data.
*	Not reported due to interference.
FILT	The sample was filtered prior to analysis.
J-01	Result is estimated due to positive results in the associated method blank.
O-01	This compound is a common laboratory contaminant.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.



**ENVIRONMENTAL CONSERVATION LABORATORIES**      **CHAIN-OF-CUSTODY RECORD**

10775 Central Port Dr.  
Orlando, FL 32824  
(407) 826-5314 Fax (407) 850-6944

4810 Executive Park Court, Suite 21  
Jacksonville, FL 32216-6069  
(904) 296-3007 Fax (904) 296-5210

102-A Woodwinds Industrial Ct.  
Cary, NC 27511  
(919) 467-3090 Fax (919) 467-351

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c Shield Engineering, Inc. (SR007)		Project Name		Requested Analyses								Requested Turnaround Times			
4301 Taggart Creek Road		Project Tools													
c Charlotte, NC 28208		PO # / Billing Info													
Tel (704) 971-4149		(704) 394-6968		Rep Mr. Dave Wallace											
Sampler(s) Name, Affiliation (Print)		Mr. Dave Wallace													
DARREN HEFFNER, CHRIS NAGY / SHIELD		Billing Co.													
Sampler(s) Signature		Site Location / Time Zone													
<i>Darren w. m.</i>															
Item #	Sample ID (field identification)	Collection Date	Collection Time	Comp / Grab	Matrix (see codes)	Total # of Containers	Preservation (See Codes) (Combine as necessary)								Sample Comments
							8015 DAI	8260B	Ag As Be Cd Cr Cu Ni Pb Sb Tl Zn	Cr VI	DRO 8015C	GRO 8015C	Hg	O&G 1664A	
MW-1		5-24-11	13:50	GRAB	GW	14	X	X	X	X	X	X	X		
MW-2			14:14		GW	14	X	X	X	X	X	X	X		
MW-3			13:59		GW	14	X	X	X	X	X	X	X		
MW-4			14:29		GW	14	X	X	X	X	X	X	X		
MW-5			14:55		GW	14	X	X	X	X	X	X	X		
MW-6			15:29		GW	14	X	X	X	X	X	X	X		
MW-7			15:59		GW	14	X	X	X	X	X	X	X		
MW-8			14:40		GW	14	X	X	X	X	X	X	X		
MW-8D			15:00		GW	14	X	X	X	X	X	X	X		
MW-12			15:32		GW	14	X	X	X	X	X	X	X		
MW-13			16:00		GW	14	X	X	X	X	X	X	X		
BAILER BLANK			10:51		GW	14	X	X	X	X	X	X	X		
<-- Total # of Containers															

Sample Kit Prepared By <b>KK</b>	Date/Time <b>5-7-11 0808</b>	Relinquished By <b>Kristin Kelly</b>	Date/Time <b>5-7-11 0808</b>	Received By <b>Suzanne</b>	Date/Time
Comments/Special Reporting Requirements  <b>Buffy</b>	Relinquished By <b>Buffy</b>	Date/Time <b>5-25-11 1010</b>	Received By <b>Suzanne</b>	Date/Time <b>5-25-11 1010</b>	
Cocler #'s & Temps on Receipt			Condition Upon Receipt <b>Acceptable</b>		

Matrix : GW-Groundwater SO-Soil DW-Drinking Water SE-Sediment SW-Surface Water WW-Wastewater A-Air O-Other (detail in comments)

Preservation: 1-Ice 2-HCl 3-HNO3 4-H2SO4 5-NO-NaOH 6-Other (detail in comments)

Note: All samples submitted to ENCO Labs are in accordance with the terms and conditions listed on the reverse of this form, unless prior written agreements exists.



## ENVIRONMENTAL CONSERVATION LABORATORIES CHAIN-OF-CUSTODY RECORD

10775 Central Port Dr.  
Orlando, FL 32824  
(407) 826-5314 Fax (407) 850 6915

4810 Executive Park Court, Suite 211  
Jacksonville, FL 32216 6069  
(904) 296 3007 Fax (904) 296 6210

102 A Workrends Industrial Ct.  
Cary, NC 27511  
(919) 467-3000 Fax (919) 467-3515

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Client Name <b>SHIELD ENGINEERING</b>		Project Number <b>COOPER TOOLS</b>		Requested Analyses						Requested Turnaround Times	
Address <b>4301 TAGGART CREEK RD</b>		Project Name/Desc <b>COOPER TOOLS</b>								Note: Rush requests subject to acceptance by the facility	
City/ST/Zip <b>CHARLOTTE, NC 28208</b>		PO # / Billing Info <b>.</b>									
Tel <b>(704) 394-6713</b>	Fax <b>204-384-6868</b>	Reporting Contact <b>DAVE WALLACE</b>								<input type="checkbox"/> Standard	
Sampler(s) Name, Affiliation (Point) <b>DANNY HEDGES, CHRIS MCGY/SILED</b>		Billing Contact <b>DAVE WALLACE</b>								<input type="checkbox"/> Expedited	
Sampler(s) Signature 		Facility # (if required)								Due ____ / ____	
Preservation (See Codes) (Combine as necessary)										Lab Workorder <b>B102Z69</b>	
Item #	Sample ID (Field Identification)	Collection Date	Collection Time	Comp / Grab	Matrix (see codes)	Total # of Containers					Sample Comments
	<b>TRIP BLANK</b>	<b>5-24-11</b>		<b>GRAB</b>	<b>w7</b>	<b>2</b>	<b>X</b>				
<-- Total # of Containers											

Sample Kit Prepared By	Date/Time	Relinquished By	Date/Time	Received By	Date/Time
Comments	Relinquished By 	Date/Time	Received By 	Date/Time <b>5/24/11 1846</b>	Date/Time
	Relinquished By 	Date/Time	Received By 	Date/Time <b>5/25/11 1015</b>	
Cooler #'s & Temps on Receipt					Condition Upon Receipt <input type="checkbox"/> Acceptable <input type="checkbox"/> Unacceptable

Matrix : GW-Groundwater SO-Soil SE-Sediment SW-Surface Water WW-Wastewater A-Air O-Other (detail in comments)

Preservation: I-Ice H-HCl N-HNO3 S-H2SO4 NO-NaOH O-Other (detail in comments)

Note - All samples submitted to ENCO Labs are in accordance with the terms and conditions listed on the reverse of this form, unless prior written agreements exist

**Environmental Conservation Laboratories, Inc.**

4810 Executive Park Court, Suite 111

Jacksonville FL, 32216-6069

Phone: 904.296.3007 FAX: 904.296.6210

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Wednesday, April 20, 2011

Shield Engineering, Inc. (SH007)

Attn: Mr. Dave Wallace

4301 Taggart Creek Road

Charlotte, NC 28208

**RE: Laboratory Results for**

**Project Number: [none], Project Name/Desc: Cooper Tools**

**ENCO Workorder: B101800**

Dear Mr. Dave Wallace,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Wednesday, April 13, 2011.

Unless otherwise noted in an attached project narrative, all samples were received in acceptable condition and processed in accordance with the referenced methods/procedures. Results for these procedures apply only to the samples as submitted.

The analytical results contained in this report are in compliance with NELAC standards, except as noted in the project narrative. This report shall not be reproduced except in full, without the written approval of the Laboratory.

This report contains only those analyses performed by Environmental Conservation Laboratories. Unless otherwise noted, all analyses were performed at ENCO Jacksonville. Data from outside organizations will be reported under separate cover.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink that reads "Lindsay J. Crawford".

Lindsay J Crawford

Project Manager

Enclosure(s)

#### PROJECT NARRATIVE

Client: Shield Engineering, Inc. (SH007)

Project: Cooper Tools

ENCO Project ID: B101800

#### Overview

All samples submitted were analyzed by Environmental Conservation Laboratories, Inc. in accordance with the methods referenced in the laboratory report. Any particular difficulties encountered during sample handling and processing will be discussed in the Remarks section below.

#### Remarks

Analysis: EPA 8260B

Affected Samples: 1D12021-BLK1, MW-11[B101800-03], MW-6[B101800-04], MW-6D[B101800-05], MW-7[B101800-06], Rinse [B101800-08], Field[B101800-09], 1D15011-BLK1, MW-6[B101800-04RE1], MW-6D[B101800-05RE1], MW-7[B101800-06RE1], Rinse [B101800-08RE1], Field[B101800-09], Trip Blank 1[B101800-11], Trip Blank 2[B101800-12]

Nonconformance: The method blank associated with the above samples showed a positive result above the MDL, but below the reporting limit for carbon disulfide.

Analysis: EPA 8260B

Affected Samples: 1D14017-BLK1, Soil-1 [B101800-10]

Nonconformance: The method blank associated to the flagged samples showed a positive result above the MDL, but below the reporting limit for Acetone. This analyte is a common laboratory contaminant.

Analysis: EPA 200.7, EPA 6010C

Affected Samples: MW-9[B101800-01], MW-10[B101800-02], MW-11[B101800-03], Rinse [B101800-08], Field[B101800-09]

Nonconformance: The method blank associated to the flagged samples showed a positive result above the MDL, but below the reporting limit for zinc due to sample filtration during prep.

Analysis: EPA 8015C

Affected Samples: MW-6[B101800-04], MW-6D[B101800-05], MW-7[B101800-06], MW-8[B101800-07], Rinse [B101800-08], Field[B101800-09], MW-4[B101800-13]

Nonconformance: The method blank associated to the flagged samples showed a positive result above the MDL, but below the reporting limit for DRO.

Lindsay J Crawford  
Project Manager

**SAMPLE SUMMARY/LABORATORY CHRONICLE**

<b>Client ID:</b>	<b>MW-9</b>	<b>Lab ID:</b>	<b>B101800-01</b>	<b>Sampled:</b>	<b>04/12/11 14:25</b>	<b>Received:</b>	<b>04/13/11 08:45</b>
<b>Parameter</b>		<b>Hold Date/Time(s)</b>		<b>Prep Date/Time(s)</b>		<b>Analysis Date/Time(s)</b>	
EPA 6010C		10/09/11		04/15/11	08:24	4/18/2011 13:50	
EPA 6020A		10/09/11		04/14/11	13:02	4/18/2011 10:41	
EPA 7470A		05/10/11		04/18/11	15:32	4/20/2011 09:57	
EPA 8260B		04/26/11		04/12/11	18:05	4/14/2011 03:44	

<b>Client ID:</b>	<b>MW-9</b>	<b>Lab ID:</b>	<b>B101800-01RE1</b>	<b>Sampled:</b>	<b>04/12/11 14:25</b>	<b>Received:</b>	<b>04/13/11 08:45</b>
<b>Parameter</b>		<b>Hold Date/Time(s)</b>		<b>Prep Date/Time(s)</b>		<b>Analysis Date/Time(s)</b>	
EPA 8260B		04/26/11		04/15/11	10:05	4/15/2011 23:10	

<b>Client ID:</b>	<b>MW-10</b>	<b>Lab ID:</b>	<b>B101800-02</b>	<b>Sampled:</b>	<b>04/12/11 14:00</b>	<b>Received:</b>	<b>04/13/11 08:45</b>
<b>Parameter</b>		<b>Hold Date/Time(s)</b>		<b>Prep Date/Time(s)</b>		<b>Analysis Date/Time(s)</b>	
EPA 6010C		10/09/11		04/15/11	08:24	4/18/2011 13:52	
EPA 6020A		10/09/11		04/14/11	13:02	4/18/2011 10:45	
EPA 7470A		05/10/11		04/18/11	15:32	4/20/2011 09:59	
EPA 8260B		04/26/11		04/12/11	18:05	4/14/2011 04:12	

<b>Client ID:</b>	<b>MW-10</b>	<b>Lab ID:</b>	<b>B101800-02RE1</b>	<b>Sampled:</b>	<b>04/12/11 14:00</b>	<b>Received:</b>	<b>04/13/11 08:45</b>
<b>Parameter</b>		<b>Hold Date/Time(s)</b>		<b>Prep Date/Time(s)</b>		<b>Analysis Date/Time(s)</b>	
EPA 8260B		04/26/11		04/15/11	10:05	4/15/2011 22:41	

<b>Client ID:</b>	<b>MW-11</b>	<b>Lab ID:</b>	<b>B101800-03</b>	<b>Sampled:</b>	<b>04/12/11 09:10</b>	<b>Received:</b>	<b>04/13/11 08:45</b>
<b>Parameter</b>		<b>Hold Date/Time(s)</b>		<b>Prep Date/Time(s)</b>		<b>Analysis Date/Time(s)</b>	
EPA 6010C		10/09/11		04/15/11	08:24	4/18/2011 13:54	
EPA 6020A		10/09/11		04/14/11	13:02	4/18/2011 10:49	
EPA 7470A		05/10/11		04/18/11	15:32	4/20/2011 10:00	
EPA 8260B		04/26/11		04/12/11	18:05	4/14/2011 07:27	

<b>Client ID:</b>	<b>MW-6</b>	<b>Lab ID:</b>	<b>B101800-04</b>	<b>Sampled:</b>	<b>04/12/11 12:05</b>	<b>Received:</b>	<b>04/13/11 08:45</b>
<b>Parameter</b>		<b>Hold Date/Time(s)</b>		<b>Prep Date/Time(s)</b>		<b>Analysis Date/Time(s)</b>	
EPA 1664A		05/10/11		04/14/11	08:51	4/18/2011 10:43	
EPA 6020A		10/09/11		04/14/11	13:02	4/18/2011 10:52	
EPA 7470A		05/10/11		04/18/11	15:32	4/20/2011 10:02	
EPA 8015C		04/19/11	05/23/11	04/13/11	14:55	4/15/2011 00:15	
EPA 8015C		04/26/11		04/15/11	09:24	4/15/2011 13:03	
EPA 8015C		04/26/11		04/18/11	10:04	4/18/2011 15:07	
SM18 3500 Cr-D		04/13/11	12:05	04/13/11	10:45	4/13/2011 11:45	



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Client ID:	MW-6	Lab ID:	B101800-04RE1	Sampled:	04/12/11 12:05	Received:	04/13/11 08:45
Parameter		Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)	
EPA 6010C		10/09/11		04/15/11	08:24	4/19/2011 11:10	
EPA 8260B		04/26/11		04/15/11	10:05	4/15/2011 20:46	

Client ID:	MW-6D	Lab ID:	B101800-05	Sampled:	04/12/11 12:20	Received:	04/13/11 08:45
Parameter		Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)	
EPA 1664A		05/10/11		04/14/11	08:51	4/18/2011 10:43	
EPA 6020A		10/09/11		04/14/11	13:02	4/18/2011 11:05	
EPA 7470A		05/10/11		04/18/11	15:32	4/20/2011 10:07	
EPA 8015C		04/19/11	05/23/11	04/13/11	14:55	4/15/2011 00:38	
EPA 8015C		04/26/11		04/15/11	09:24	4/15/2011 13:14	
EPA 8015C		04/26/11		04/18/11	10:04	4/18/2011 15:38	
SM18 3500 Cr-D		04/13/11	12:20	04/13/11	10:45	4/13/2011 11:45	

Client ID:	MW-6D	Lab ID:	B101800-05RE1	Sampled:	04/12/11 12:20	Received:	04/13/11 08:45
Parameter		Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)	
EPA 6010C		10/09/11		04/15/11	08:24	4/19/2011 11:12	
EPA 8260B		04/26/11		04/15/11	10:05	4/15/2011 21:14	

Client ID:	MW-7	Lab ID:	B101800-06	Sampled:	04/12/11 12:40	Received:	04/13/11 08:45
Parameter		Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)	
EPA 1664A		05/10/11		04/14/11	08:51	4/18/2011 10:43	
EPA 6010C		10/09/11		04/15/11	08:24	4/18/2011 14:04	
EPA 6020A		10/09/11		04/14/11	13:02	4/18/2011 11:09	
EPA 7470A		05/10/11		04/18/11	15:32	4/20/2011 10:09	
EPA 8015C		04/19/11	05/23/11	04/13/11	14:55	4/15/2011 01:02	
EPA 8015C		04/26/11		04/15/11	09:24	4/15/2011 13:25	
EPA 8015C		04/26/11		04/18/11	10:04	4/18/2011 16:10	
SM18 3500 Cr-D		04/13/11	12:40	04/13/11	10:45	4/13/2011 11:45	

Client ID:	MW-7	Lab ID:	B101800-06RE1	Sampled:	04/12/11 12:40	Received:	04/13/11 08:45
Parameter		Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)	
EPA 8260B		04/26/11		04/15/11	10:05	4/15/2011 21:43	

Client ID:	MW-8	Lab ID:	B101800-07	Sampled:	04/12/11 14:50	Received:	04/13/11 08:45
Parameter		Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)	
EPA 1664A		05/10/11		04/14/11	08:51	4/18/2011 10:43	
EPA 6010C		10/09/11		04/15/11	08:24	4/18/2011 14:06	
EPA 6020A		10/09/11		04/14/11	13:02	4/18/2011 11:13	
EPA 7470A		05/10/11		04/18/11	15:32	4/20/2011 10:11	
EPA 8015C		04/19/11	05/23/11	04/13/11	14:55	4/15/2011 01:25	
EPA 8015C		04/26/11		04/15/11	09:24	4/15/2011 13:47	
EPA 8260B		04/26/11		04/12/11	18:05	4/14/2011 09:25	
SM18 3500 Cr-D		04/13/11	14:50	04/13/11	10:45	4/13/2011 11:45	

<b>Client ID:</b>	<b>MW-8</b>	<b>Lab ID:</b>	<b>B101800-07RE1</b>	<b>Sampled:</b>	<b>04/12/11 14:50</b>	<b>Received:</b>	<b>04/13/11 08:45</b>
<b>Parameter</b>		<b>Hold Date/Time(s)</b>		<b>Prep Date/Time(s)</b>		<b>Analysis Date/Time(s)</b>	
EPA 8015C		04/26/11		04/18/11	10:04	4/19/2011 13:24	
EPA 8260B		04/26/11		04/15/11	10:05	4/15/2011 23:39	

<b>Client ID:</b>	<b>Rinse</b>	<b>Lab ID:</b>	<b>B101800-08</b>	<b>Sampled:</b>	<b>04/12/11 10:00</b>	<b>Received:</b>	<b>04/13/11 08:45</b>
<b>Parameter</b>		<b>Hold Date/Time(s)</b>		<b>Prep Date/Time(s)</b>		<b>Analysis Date/Time(s)</b>	
EPA 1664A		05/10/11		04/14/11	08:51	4/18/2011 10:43	
EPA 6010C		10/09/11		04/15/11	08:24	4/18/2011 14:08	
EPA 6020A		10/09/11		04/14/11	13:02	4/18/2011 11:16	
EPA 7470A		05/10/11		04/18/11	15:32	4/20/2011 10:12	
EPA 8015C		04/19/11	05/23/11	04/13/11	14:55	4/15/2011 01:49	
EPA 8015C		04/26/11		04/15/11	09:24	4/15/2011 13:58	
SM18 3500 Cr-D		04/13/11	10:00	04/13/11	09:05	4/13/2011 09:15	

<b>Client ID:</b>	<b>Rinse</b>	<b>Lab ID:</b>	<b>B101800-08RE1</b>	<b>Sampled:</b>	<b>04/12/11 10:00</b>	<b>Received:</b>	<b>04/13/11 08:45</b>
<b>Parameter</b>		<b>Hold Date/Time(s)</b>		<b>Prep Date/Time(s)</b>		<b>Analysis Date/Time(s)</b>	
EPA 8015C		04/26/11		04/18/11	10:04	4/19/2011 12:52	
EPA 8260B		04/26/11		04/15/11	10:05	4/15/2011 20:18	

<b>Client ID:</b>	<b>Field</b>	<b>Lab ID:</b>	<b>B101800-09</b>	<b>Sampled:</b>	<b>04/12/11 15:40</b>	<b>Received:</b>	<b>04/13/11 08:45</b>
<b>Parameter</b>		<b>Hold Date/Time(s)</b>		<b>Prep Date/Time(s)</b>		<b>Analysis Date/Time(s)</b>	
EPA 1664A		05/10/11		04/14/11	08:51	4/18/2011 10:43	
EPA 6010C		10/09/11		04/15/11	08:24	4/18/2011 14:11	
EPA 6020A		10/09/11		04/14/11	13:02	4/18/2011 11:20	
EPA 7470A		05/10/11		04/18/11	15:32	4/20/2011 10:14	
EPA 8015C		04/19/11	05/23/11	04/13/11	14:55	4/15/2011 02:13	
EPA 8015C		04/26/11		04/15/11	09:24	4/15/2011 14:09	
EPA 8015C		04/26/11		04/18/11	10:04	4/18/2011 18:15	
EPA 8260B		04/26/11		04/15/11	10:05	4/15/2011 16:07	
SM18 3500 Cr-D		04/13/11	15:40	04/13/11	10:45	4/13/2011 11:45	

<b>Client ID:</b>	<b>Soil-1</b>	<b>Lab ID:</b>	<b>B101800-10</b>	<b>Sampled:</b>	<b>04/12/11 11:25</b>	<b>Received:</b>	<b>04/13/11 08:45</b>
<b>Parameter</b>		<b>Hold Date/Time(s)</b>		<b>Prep Date/Time(s)</b>		<b>Analysis Date/Time(s)</b>	
EPA 8260B		04/26/11		04/14/11	15:55	4/15/2011 02:19	

<b>Client ID:</b>	<b>Trip Blank 1</b>	<b>Lab ID:</b>	<b>B101800-11</b>	<b>Sampled:</b>	<b>04/12/11 00:00</b>	<b>Received:</b>	<b>04/13/11 08:45</b>
<b>Parameter</b>		<b>Hold Date/Time(s)</b>		<b>Prep Date/Time(s)</b>		<b>Analysis Date/Time(s)</b>	
EPA 8260B		04/26/11		04/15/11	10:05	4/15/2011 15:39	

<b>Client ID:</b>	<b>Trip Blank 2</b>	<b>Lab ID:</b>	<b>B101800-12</b>	<b>Sampled:</b>	<b>04/12/11 00:00</b>	<b>Received:</b>	<b>04/13/11 08:45</b>
<b>Parameter</b>		<b>Hold Date/Time(s)</b>		<b>Prep Date/Time(s)</b>		<b>Analysis Date/Time(s)</b>	
EPA 8260B		04/26/11		04/15/11	10:05	4/15/2011 15:11	



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Client ID:	MW-4	Lab ID:	B101800-13	Sampled:	04/12/11 15:15	Received:	04/13/11 08:45
Parameter				Hold Date/Time(s)		Prep Date/Time(s)	Analysis Date/Time(s)
EPA 1664A				05/10/11		04/14/11 08:51	4/18/2011 10:43
EPA 8015C				04/19/11	05/23/11	04/13/11 14:55	4/15/2011 02:36

**SAMPLE DETECTION SUMMARY**

<b>Client ID:</b> MW-9	<b>Lab ID:</b> B101800-01						
Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
1,1,2-Trichloroethane	36		0.40	1.0	ug/L	EPA 8260B	
1,2,3-Trichlorobenzene	1.2		0.50	1.0	ug/L	EPA 8260B	
1,2,4-Trichlorobenzene	48		0.41	1.0	ug/L	EPA 8260B	
1,2-Dichloroethane	13		0.28	1.0	ug/L	EPA 8260B	
1,3-Dichlorobenzene	1.2		0.27	1.0	ug/L	EPA 8260B	
1,4-Dichlorobenzene	28		0.23	1.0	ug/L	EPA 8260B	
2-Butanone	120		0.38	5.0	ug/L	EPA 8260B	
2-Chlorotoluene	0.34	I	0.33	1.0	ug/L	EPA 8260B	
Chlorobenzene	3.9		0.24	1.0	ug/L	EPA 8260B	
Chloroform	0.50	I	0.21	1.0	ug/L	EPA 8260B	
Chromium - Total	1.86	I	1.30	10.0	ug/L	EPA 6010C	
cis-1,2-Dichloroethene	24		0.22	1.0	ug/L	EPA 8260B	
Naphthalene	0.54	I	0.30	1.0	ug/L	EPA 8260B	
Nickel - Total	3.17	I	1.10	10.0	ug/L	EPA 6010C	
Tetrachloroethene	7.5		0.21	1.0	ug/L	EPA 8260B	
Thallium - Total	0.295	I	0.110	1.00	ug/L	EPA 6020A	
trans-1,2-Dichloroethene	0.86	I	0.30	1.0	ug/L	EPA 8260B	
Trichloroethene	17		0.24	1.0	ug/L	EPA 8260B	
Vinyl chloride	32		0.33	1.0	ug/L	EPA 8260B	
Zinc - Total	4.92	IV	3.50	10.0	ug/L	EPA 6010C	J-01

<b>Client ID:</b> MW-9	<b>Lab ID:</b> B101800-01RE1						
Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
1,1,1-Trichloroethane	2800		20	100	ug/L	EPA 8260B	
1,1-Dichloroethane	1800		30	100	ug/L	EPA 8260B	
1,1-Dichloroethene	1500		21	100	ug/L	EPA 8260B	
Chloroethane	310		31	100	ug/L	EPA 8260B	

<b>Client ID:</b> MW-10	<b>Lab ID:</b> B101800-02						
Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
1,1,1-Trichloroethane	190		0.20	1.0	ug/L	EPA 8260B	
1,1,2-Trichloroethane	10		0.40	1.0	ug/L	EPA 8260B	
1,2,4-Trichlorobenzene	1.5		0.41	1.0	ug/L	EPA 8260B	
1,2-Dichloroethane	2.8		0.28	1.0	ug/L	EPA 8260B	
1,4-Dichlorobenzene	0.38	I	0.23	1.0	ug/L	EPA 8260B	
Chloroethane	5.4		0.31	1.0	ug/L	EPA 8260B	
Chromium - Total	1.93	I	1.30	10.0	ug/L	EPA 6010C	
cis-1,2-Dichloroethene	16		0.22	1.0	ug/L	EPA 8260B	
Copper - Total	1.79	I	1.50	10.0	ug/L	EPA 6010C	
Nickel - Total	1.90	I	1.10	10.0	ug/L	EPA 6010C	
Tetrachloroethene	1.7		0.21	1.0	ug/L	EPA 8260B	
Thallium - Total	0.206	I	0.110	1.00	ug/L	EPA 6020A	
Trichloroethene	4.8		0.24	1.0	ug/L	EPA 8260B	
Zinc - Total	3.98	IV	3.50	10.0	ug/L	EPA 6010C	J-01

<b>Client ID:</b> MW-10	<b>Lab ID:</b> B101800-02RE1						
Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
1,1-Dichloroethane	650		3.0	10	ug/L	EPA 8260B	
1,1-Dichloroethene	400		2.1	10	ug/L	EPA 8260B	



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Client ID: MW-11		Lab ID: B101800-03					
Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
1,1,1-Trichloroethane	1.5		0.20	1.0	ug/L	EPA 8260B	
1,1-Dichloroethane	12		0.30	1.0	ug/L	EPA 8260B	
1,1-Dichloroethene	8.7		0.21	1.0	ug/L	EPA 8260B	
Carbon disulfide	0.39	IV	0.24	5.0	ug/L	EPA 8260B	J-01
Chloroform	2.1		0.21	1.0	ug/L	EPA 8260B	
Chromium - Total	18.3		1.30	10.0	ug/L	EPA 6010C	
cis-1,2-Dichloroethene	0.63	I	0.22	1.0	ug/L	EPA 8260B	
Nickel - Total	1.96	I	1.10	10.0	ug/L	EPA 6010C	
Thallium - Total	0.211	I	0.110	1.00	ug/L	EPA 6020A	
Zinc - Total	62.2	V	3.50	10.0	ug/L	EPA 6010C	J-01

Client ID: MW-6		Lab ID: B101800-04					
Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Antimony - Total	0.354	I	0.220	2.00	ug/L	EPA 6020A	
DRO (C10-C28)	0.033	IV	0.024	0.10	mg/L	EPA 8015C	J-01
GRO (C6-C10)	0.016	I	0.011	0.055	mg/L	EPA 8015C	
Thallium - Total	0.275	I	0.110	1.00	ug/L	EPA 6020A	

Client ID: MW-6		Lab ID: B101800-04RE1					
Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
1,1-Dichloroethane	0.63	I	0.30	1.0	ug/L	EPA 8260B	
1,1-Dichloroethene	18		0.21	1.0	ug/L	EPA 8260B	
Arsenic - Total	821		67.0	100	ug/L	EPA 6010C	
Beryllium - Total	31.0		1.00	10.0	ug/L	EPA 6010C	
Carbon disulfide	0.55	IV	0.24	5.0	ug/L	EPA 8260B	J-01
Chromium - Total	234		13.0	100	ug/L	EPA 6010C	
cis-1,2-Dichloroethene	2.3		0.22	1.0	ug/L	EPA 8260B	
Copper - Total	919		15.0	100	ug/L	EPA 6010C	
Lead - Total	1860		29.0	100	ug/L	EPA 6010C	
Nickel - Total	87.6	I	11.0	100	ug/L	EPA 6010C	
Tetrachloroethene	22		0.21	1.0	ug/L	EPA 8260B	
Trichloroethene	8.8		0.24	1.0	ug/L	EPA 8260B	
Zinc - Total	227	V	35.0	100	ug/L	EPA 6010C	QB-01

Client ID: MW-6D		Lab ID: B101800-05					
Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Antimony - Total	0.375	I	0.220	2.00	ug/L	EPA 6020A	
DRO (C10-C28)	0.034	IV	0.024	0.10	mg/L	EPA 8015C	J-01
GRO (C6-C10)	0.016	I	0.011	0.055	mg/L	EPA 8015C	
Mercury - Total	0.748	I	0.720	2.00	ug/L	EPA 7470A	
Thallium - Total	0.259	I	0.110	1.00	ug/L	EPA 6020A	

Client ID: MW-6D		Lab ID: B101800-05RE1					
Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
1,1-Dichloroethane	0.76	I	0.30	1.0	ug/L	EPA 8260B	
1,1-Dichloroethene	19		0.21	1.0	ug/L	EPA 8260B	
Arsenic - Total	914		67.0	100	ug/L	EPA 6010C	
Beryllium - Total	33.4		1.00	10.0	ug/L	EPA 6010C	
Carbon disulfide	0.49	IV	0.24	5.0	ug/L	EPA 8260B	J-01
Chromium - Total	269		13.0	100	ug/L	EPA 6010C	



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Client ID: MW-6D		Lab ID: B101800-05RE1					
Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
cis-1,2-Dichloroethene	2.7		0.22	1.0	ug/L	EPA 8260B	
Copper - Total	1000		15.0	100	ug/L	EPA 6010C	
Lead - Total	1990		29.0	100	ug/L	EPA 6010C	
Nickel - Total	103		11.0	100	ug/L	EPA 6010C	
Tetrachloroethene	23		0.21	1.0	ug/L	EPA 8260B	
Trichloroethene	9.0		0.24	1.0	ug/L	EPA 8260B	
Zinc - Total	240	V	35.0	100	ug/L	EPA 6010C	QB-01

Client ID: MW-7		Lab ID: B101800-06					
Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Cadmium - Total	0.402	I	0.370	1.00	ug/L	EPA 6010C	
DRO (C10-C28)	0.034	IV	0.024	0.10	mg/L	EPA 8015C	J-01
GRO (C6-C10)	0.097		0.011	0.055	mg/L	EPA 8015C	
Thallium - Total	0.429	I	0.110	1.00	ug/L	EPA 6020A	

Client ID: MW-7		Lab ID: B101800-06RE1					
Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
1,1-Dichloroethene	15		1.0	5.0	ug/L	EPA 8260B	
Carbon disulfide	2.2	IV	1.2	25	ug/L	EPA 8260B	J-01
Tetrachloroethene	230		1.0	5.0	ug/L	EPA 8260B	

Client ID: MW-8		Lab ID: B101800-07					
Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
1,1-Dichloroethene	48		2.1	10	ug/L	EPA 8260B	
cis-1,2-Dichloroethene	41		2.2	10	ug/L	EPA 8260B	
DRO (C10-C28)	0.039	IV	0.024	0.10	mg/L	EPA 8015C	J-01
Oil & Grease (HEM)	4.41	I	3.00	5.00	mg/L	EPA 1664A	
Thallium - Total	0.185	I	0.110	1.00	ug/L	EPA 6020A	
Trichloroethene	81		2.4	10	ug/L	EPA 8260B	

Client ID: MW-8		Lab ID: B101800-07RE1					
Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
GRO (C6-C10)	2.01		0.022	0.110	mg/L	EPA 8015C	
Tetrachloroethene	6200		21	100	ug/L	EPA 8260B	

Client ID: Rinse		Lab ID: B101800-08					
Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
DRO (C10-C28)	0.054	IV	0.024	0.10	mg/L	EPA 8015C	J-01
Zinc - Total	41.2	V	3.50	10.0	ug/L	EPA 6010C	J-01

Client ID: Rinse		Lab ID: B101800-08RE1					
Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Carbon disulfide	0.41	IV	0.24	5.0	ug/L	EPA 8260B	J-01

Client ID: Field		Lab ID: B101800-09					
Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Carbon disulfide	0.48	IV	0.24	5.0	ug/L	EPA 8260B	J-01
DRO (C10-C28)	0.054	IV	0.024	0.10	mg/L	EPA 8015C	J-01
Oil & Grease (HEM)	4.82	I	3.00	5.00	mg/L	EPA 1664A	
Zinc - Total	15.2	V	3.50	10.0	ug/L	EPA 6010C	J-01

<b>Client ID:</b> Soil-1		<b>Lab ID:</b> B101800-10						
<b>Analyte</b>		<b>Results</b>	<b>Flag</b>	<b>MDL</b>	<b>PQL</b>	<b>Units</b>	<b>Method</b>	<b>Notes</b>
1,1-Dichloroethane		0.073		0.0004	0.0010	mg/kg dry	EPA 8260B	
1,1-Dichloroethene		0.0006	I	0.0005	0.0010	mg/kg dry	EPA 8260B	
1,2-Dichloroethane		0.0009	I	0.0004	0.0010	mg/kg dry	EPA 8260B	
2-Butanone		0.043		0.0027	0.0051	mg/kg dry	EPA 8260B	
4-Isopropyltoluene		0.0020		0.0005	0.0010	mg/kg dry	EPA 8260B	
Acetone		0.30	LV	0.0013	0.010	mg/kg dry	EPA 8260B	QB-01
Benzene		0.0007	I	0.0003	0.0010	mg/kg dry	EPA 8260B	
Carbon disulfide		0.0027	I	0.0011	0.0051	mg/kg dry	EPA 8260B	
Chlorobenzene		0.0004	I	0.0003	0.0010	mg/kg dry	EPA 8260B	
Chloroethane		0.0050		0.0003	0.0010	mg/kg dry	EPA 8260B	
cis-1,2-Dichloroethene		0.054		0.0002	0.0010	mg/kg dry	EPA 8260B	
Ethylbenzene		0.0006	I	0.0006	0.0010	mg/kg dry	EPA 8260B	
Toluene		0.047		0.0005	0.0010	mg/kg dry	EPA 8260B	
trans-1,2-Dichloroethene		0.0069		0.0003	0.0010	mg/kg dry	EPA 8260B	
Trichloroethene		0.0024		0.0004	0.0010	mg/kg dry	EPA 8260B	
Vinyl chloride		0.0061		0.0005	0.0010	mg/kg dry	EPA 8260B	

<b>Client ID:</b> Trip Blank 1		<b>Lab ID:</b> B101800-11						
<b>Analyte</b>		<b>Results</b>	<b>Flag</b>	<b>MDL</b>	<b>PQL</b>	<b>Units</b>	<b>Method</b>	<b>Notes</b>
Carbon disulfide		0.54	IV	0.24	5.0	ug/L	EPA 8260B	J-01

<b>Client ID:</b> Trip Blank 2		<b>Lab ID:</b> B101800-12						
<b>Analyte</b>		<b>Results</b>	<b>Flag</b>	<b>MDL</b>	<b>PQL</b>	<b>Units</b>	<b>Method</b>	<b>Notes</b>
Carbon disulfide		0.55	IV	0.24	5.0	ug/L	EPA 8260B	J-01

<b>Client ID:</b> MW-4		<b>Lab ID:</b> B101800-13						
<b>Analyte</b>		<b>Results</b>	<b>Flag</b>	<b>MDL</b>	<b>PQL</b>	<b>Units</b>	<b>Method</b>	<b>Notes</b>
DRO (C10-C28)		0.054	IV	0.024	0.10	mg/L	EPA 8015C	J-01
Oil & Grease (HEM)		3.07	I	3.00	5.00	mg/L	EPA 1664A	

### ANALYTICAL RESULTS

**Description:** MW-9

**Lab Sample ID:** B101800-01

**Received:** 04/13/11 08:45

**Matrix:** Ground Water

**Sampled:** 04/12/11 14:25

**Work Order:** B101800

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

#### Volatile Organic Compounds by GCMS

<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	POL	Batch	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.20	U	ug/L	1	0.20	1.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
<b>1,1,1-Trichloroethane [71-55-6] ^</b>	<b>2800</b>		ug/L	100	20	100	1D15011	EPA 8260B	04/15/11 23:10	GMB	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.32	U	ug/L	1	0.32	1.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
<b>1,1,2-Trichloroethane [79-00-5] ^</b>	<b>36</b>		ug/L	1	0.40	1.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
<b>1,1-Dichloroethane [75-34-3] ^</b>	<b>1800</b>		ug/L	100	30	100	1D15011	EPA 8260B	04/15/11 23:10	GMB	
<b>1,1-Dichloroethene [75-35-4] ^</b>	<b>1500</b>		ug/L	100	21	100	1D15011	EPA 8260B	04/15/11 23:10	GMB	
1,1-Dichloropropene [563-58-6] ^	0.21	U	ug/L	1	0.21	1.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
<b>1,2,2-Trichlorobenzene [87-61-6] ^</b>	<b>1.2</b>		ug/L	1	0.50	1.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
1,2,3-Trichloropropane [96-18-4] ^	0.30	U	ug/L	1	0.30	1.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
<b>1,2,4-Trichlorobenzene [120-82-1] ^</b>	<b>48</b>		ug/L	1	0.41	1.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
1,2,4-Trimethylbenzene [95-63-6] ^	0.28	U	ug/L	1	0.28	1.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.60	U	ug/L	1	0.60	1.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
1,2-Dibromoethane [106-93-4] ^	0.27	U	ug/L	1	0.27	1.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
1,2-Dichlorobenzene [95-50-1] ^	0.24	U	ug/L	1	0.24	1.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
<b>1,2-Dichloroethane [107-06-2] ^</b>	<b>13</b>		ug/L	1	0.28	1.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
1,2-Dichloropropane [78-87-5] ^	0.30	U	ug/L	1	0.30	1.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
1,3,5-Trimethylbenzene [108-67-8] ^	0.26	U	ug/L	1	0.26	1.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
<b>1,3-Dichlorobenzene [541-73-1] ^</b>	<b>1.2</b>		ug/L	1	0.27	1.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
1,3-Dichloropropene [142-28-9] ^	0.25	U	ug/L	1	0.25	1.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
<b>1,4-Dichlorobenzene [106-46-7] ^</b>	<b>28</b>		ug/L	1	0.23	1.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
2,2-Dichloropropane [594-20-7] ^	0.40	U	ug/L	1	0.40	1.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
<b>2-Butanone [78-93-3] ^</b>	<b>120</b>		ug/L	1	0.38	5.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
2-Chloroethyl Vinyl Ether [110-75-8] ^	1.5	U	ug/L	1	1.5	5.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
<b>2-Chlorotoluene [95-49-8] ^</b>	<b>0.34</b>	I	ug/L	1	0.33	1.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
2-Hexanone [591-78-6] ^	0.50	U	ug/L	1	0.50	5.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
4-Chlorotoluene [106-43-4] ^	0.22	U	ug/L	1	0.22	1.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
4-Isopropyltoluene [99-87-6] ^	0.29	U	ug/L	1	0.29	1.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
4-Methyl-2-pentanone [108-10-1] ^	1.0	U	ug/L	1	1.0	5.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
Acetone [67-64-1] ^	1.1	U	ug/L	1	1.1	5.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
Benzene [71-43-2] ^	0.27	U	ug/L	1	0.27	1.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
Bromobenzene [108-86-1] ^	0.26	U	ug/L	1	0.26	1.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
Bromochloromethane [74-97-5] ^	0.28	U	ug/L	1	0.28	1.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
Bromodichloromethane [75-27-4] ^	0.20	U	ug/L	1	0.20	1.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
Bromoform [75-25-2] ^	0.33	U	ug/L	1	0.33	1.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
Bromomethane [74-83-9] ^	0.64	U	ug/L	1	0.64	1.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
Carbon disulfide [75-15-0] ^	0.24	U	ug/L	1	0.24	5.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
Carbon tetrachloride [56-23-5] ^	0.20	U	ug/L	1	0.20	1.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
<b>Chlorobenzene [108-90-7] ^</b>	<b>3.9</b>		ug/L	1	0.24	1.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
<b>Chloroethane [75-00-3] ^</b>	<b>310</b>		ug/L	100	31	100	1D15011	EPA 8260B	04/15/11 23:10	GMB	
<b>Chloroform [67-66-3] ^</b>	<b>0.50</b>	I	ug/L	1	0.21	1.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
Chloromethane [74-87-3] ^	0.31	U	ug/L	1	0.31	1.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
<b>cis-1,2-Dichloroethene [156-59-2] ^</b>	<b>24</b>		ug/L	1	0.22	1.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
<b>cis-1,3-Dichloropropene [10061-01-5] ^</b>	<b>0.35</b>	U	ug/L	1	0.35	1.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
Dibromochloromethane [124-48-1] ^	0.27	U	ug/L	1	0.27	1.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
Dichlorodifluoromethane [75-71-8] ^	0.29	U	ug/L	1	0.29	1.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
Ethylbenzene [100-41-4] ^	0.26	U	ug/L	1	0.26	1.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
Hexachlorobutadiene [87-68-3] ^	0.35	U	ug/L	1	0.35	1.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	

**Description:** MW-9

**Lab Sample ID:** B101800-01

**Received:** 04/13/11 08:45

**Matrix:** Ground Water

**Sampled:** 04/12/11 14:25

**Work Order:** B101800

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Volatile Organic Compounds by GCMS**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>POL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Isopropylbenzene [98-82-8] ^	0.20	U	ug/L	1	0.20	1.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
m,p-Xylenes [108-38-3/106-42-3] ^	0.50	U	ug/L	1	0.50	2.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
Methylene chloride [75-09-2] ^	0.62	U	ug/L	1	0.62	1.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
Methyl-tert-Butyl Ether [1634-04-4] ^	0.24	U	ug/L	1	0.24	1.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
<b>Naphthalene [91-20-3] ^</b>	<b>0.54</b>	<b>I</b>	<b>ug/L</b>	<b>1</b>	<b>0.30</b>	<b>1.0</b>	<b>1D12021</b>	<b>EPA 8260B</b>	<b>04/14/11 03:44</b>	<b>GMB</b>	
n-Butyl Benzene [104-51-8] ^	0.28	U	ug/L	1	0.28	1.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
n-Propyl Benzene [103-65-1] ^	0.20	U	ug/L	1	0.20	1.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
o-Xylene [95-47-6] ^	0.25	U	ug/L	1	0.25	1.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
sec-Butylbenzene [135-98-8] ^	0.20	U	ug/L	1	0.20	1.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
Styrene [100-42-5] ^	0.32	U	ug/L	1	0.32	1.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
tert-Butylbenzene [98-06-6] ^	0.21	U	ug/L	1	0.21	1.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
<b>Tetrachloroethene [127-18-4] ^</b>	<b>7.5</b>		<b>ug/L</b>	<b>1</b>	<b>0.21</b>	<b>1.0</b>	<b>1D12021</b>	<b>EPA 8260B</b>	<b>04/14/11 03:44</b>	<b>GMB</b>	
Toluene [108-88-3] ^	0.30	U	ug/L	1	0.30	1.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
<b>trans-1,2-Dichloroethene [156-60-5] ^</b>	<b>0.86</b>	<b>I</b>	<b>ug/L</b>	<b>1</b>	<b>0.30</b>	<b>1.0</b>	<b>1D12021</b>	<b>EPA 8260B</b>	<b>04/14/11 03:44</b>	<b>GMB</b>	
trans-1,3-Dichloropropene [10061-02-6] ^	0.33	U	ug/L	1	0.33	1.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
<b>Trichloroethene [79-01-6] ^</b>	<b>17</b>		<b>ug/L</b>	<b>1</b>	<b>0.24</b>	<b>1.0</b>	<b>1D12021</b>	<b>EPA 8260B</b>	<b>04/14/11 03:44</b>	<b>GMB</b>	
Trichlorofluoromethane [75-69-4] ^	0.20	U	ug/L	1	0.20	1.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
<b>Vinyl chloride [75-01-4] ^</b>	<b>32</b>		<b>ug/L</b>	<b>1</b>	<b>0.33</b>	<b>1.0</b>	<b>1D12021</b>	<b>EPA 8260B</b>	<b>04/14/11 03:44</b>	<b>GMB</b>	
Xylenes (Total) [1330-20-7] ^	0.50	U	ug/L	1	0.50	1.0	1D12021	EPA 8260B	04/14/11 03:44	GMB	
<hr/>											
<b>Surrogates</b>	<b>Results</b>	<b>DF</b>	<b>Spike Lvl</b>	<b>% Rec</b>	<b>% Rec Limits</b>		<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
4-Bromofluorobenzene	47	I	50.0	94 %	62-132		1D12021	EPA 8260B	04/14/11 03:44	GMB	
4-Bromofluorobenzene	46	I	50.0	91 %	62-132		1D15011	EPA 8260B	04/15/11 23:10	GMB	
Dibromofluoromethane	50	I	50.0	101 %	73-134		1D12021	EPA 8260B	04/14/11 03:44	GMB	
Dibromofluoromethane	55	I	50.0	110 %	73-134		1D15011	EPA 8260B	04/15/11 23:10	GMB	
Toluene-d8	50	I	50.0	100 %	66-138		1D12021	EPA 8260B	04/14/11 03:44	GMB	
Toluene-d8	53	I	50.0	106 %	66-138		1D15011	EPA 8260B	04/15/11 23:10	GMB	

**Description:** MW-9**Lab Sample ID:** B101800-01**Received:** 04/13/11 08:45**Matrix:** Ground Water**Sampled:** 04/12/11 14:25**Work Order:** B101800**Project:** Cooper Tools**Sampled By:** Danny Hefner**Metals by EPA 6000/7000 Series Methods**

^ - ENCO Jacksonville certified analyte [INC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>POL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Mercury [7439-97-6] ^	0.0720	U	ug/L	1	0.0720	0.200	1D18013	EPA 7470A	04/20/11 09:57	LTS	

**Description:** MW-9

**Lab Sample ID:** B101800-01

**Received:** 04/13/11 08:45

**Matrix:** Ground Water

**Sampled:** 04/12/11 14:25

**Work Order:** B101800

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Metals (total recoverable) by EPA 6000/7000 Series Methods**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>POL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Arsenic [7440-38-2] ^	6.70	U	ug/L	1	6.70	10.0	1D15004	EPA 6010C	04/18/11 13:50	ACV	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1D15004	EPA 6010C	04/18/11 13:50	ACV	
Cadmium [7440-43-9] ^	0.370	U	ug/L	1	0.370	1.00	1D15004	EPA 6010C	04/18/11 13:50	ACV	
Chromium [7440-47-3] ^	<b>1.86</b>	I	ug/L	1	1.30	10.0	1D15004	EPA 6010C	04/18/11 13:50	ACV	
Copper [7440-50-8] ^	1.50	U	ug/L	1	1.50	10.0	1D15004	EPA 6010C	04/18/11 13:50	ACV	
Lead [7439-92-1] ^	2.90	U	ug/L	1	2.90	10.0	1D15004	EPA 6010C	04/18/11 13:50	ACV	
Nickel [7440-02-0] ^	<b>3.17</b>	I	ug/L	1	1.10	10.0	1D15004	EPA 6010C	04/18/11 13:50	ACV	
Selenium [7782-49-2] ^	8.90	U	ug/L	1	8.90	10.0	1D15004	EPA 6010C	04/18/11 13:50	ACV	
Silver [7440-22-4] ^	1.50	U	ug/L	1	1.50	10.0	1D15004	EPA 6010C	04/18/11 13:50	ACV	
Zinc [7440-66-6] ^	<b>4.92</b>	IV	ug/L	1	3.50	10.0	1D15004	EPA 6010C	04/18/11 13:50	ACV	J-01

**Description:** MW-9

**Lab Sample ID:** B101800-01

**Received:** 04/13/11 08:45

**Matrix:** Ground Water

**Sampled:** 04/12/11 14:25

**Work Order:** B101800

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Metals (total recoverable) by EPA 6000/7000 Series Methods**
<sup>^</sup> - ENCO Cary certified analyte [NC 591]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>POL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Antimony [7440-36-0] ^	0.220	U	ug/L	1	0.220	2.00	ID14028	EPA 6020A	04/18/11 10:41	VLO	
Thallium [7440-28-0] ^	0.295	I	ug/L	1	0.110	1.00	ID14028	EPA 6020A	04/18/11 10:41	VLO	

**Description:** MW-10

**Lab Sample ID:** B101800-02

**Received:** 04/13/11 08:45

**Matrix:** Ground Water

**Sampled:** 04/12/11 14:00

**Work Order:** B101800

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

### Volatile Organic Compounds by GCMS

<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	POI	Batch	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.20	U	ug/L	1	0.20	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
<b>1,1,1-Trichloroethane [71-55-6] ^</b>	<b>190</b>		ug/L	1	0.20	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.32	U	ug/L	1	0.32	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
<b>1,1,2-Trichloroethane [79-00-5] ^</b>	<b>10</b>		ug/L	1	0.40	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
<b>1,1-Dichloroethane [75-34-3] ^</b>	<b>650</b>		ug/L	10	3.0	10	1D15011	EPA 8260B	04/15/11 22:41	GMB	
<b>1,1-Dichloroethene [75-35-4] ^</b>	<b>400</b>		ug/L	10	2.1	10	1D15011	EPA 8260B	04/15/11 22:41	GMB	
1,1-Dichloropropene [563-58-6] ^	0.21	U	ug/L	1	0.21	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
1,2,3-Trichlorobenzene [87-61-6] ^	0.50	U	ug/L	1	0.50	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
1,2,3-Trichloropropane [96-18-4] ^	0.30	U	ug/L	1	0.30	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
<b>1,2,4-Trichlorobenzene [120-82-1] ^</b>	<b>1.5</b>		ug/L	1	0.41	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
1,2,4-Trimethylbenzene [95-63-6] ^	0.28	U	ug/L	1	0.28	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.60	U	ug/L	1	0.60	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
1,2-Dibromoethane [106-93-4] ^	0.27	U	ug/L	1	0.27	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
1,2-Dichlorobenzene [95-50-1] ^	0.24	U	ug/L	1	0.24	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
<b>1,2-Dichloroethane [107-06-2] ^</b>	<b>2.8</b>		ug/L	1	0.28	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
1,2-Dichloropropane [78-87-5] ^	0.30	U	ug/L	1	0.30	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
1,3,5-Trimethylbenzene [108-67-8] ^	0.26	U	ug/L	1	0.26	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
1,3-Dichlorobenzene [541-73-1] ^	0.27	U	ug/L	1	0.27	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
1,3-Dichloropropane [142-28-9] ^	0.25	U	ug/L	1	0.25	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
<b>1,4-Dichlorobenzene [106-46-7] ^</b>	<b>0.38</b>	I	ug/L	1	0.23	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
2,2-Dichloropropane [594-20-7] ^	0.40	U	ug/L	1	0.40	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
2-Butanone [78-93-3] ^	0.38	U	ug/L	1	0.38	5.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
2-Chloroethyl Vinyl Ether [110-75-8] ^	1.5	U	ug/L	1	1.5	5.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
2-Chlorotoluene [95-49-8] ^	0.33	U	ug/L	1	0.33	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
2-Hexanone [591-78-6] ^	0.50	U	ug/L	1	0.50	5.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
4-Chlorotoluene [106-43-4] ^	0.22	U	ug/L	1	0.22	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
4-Isopropyltoluene [99-87-6] ^	0.29	U	ug/L	1	0.29	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
4-Methyl-2-pentanone [108-10-1] ^	1.0	U	ug/L	1	1.0	5.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
Acetone [67-64-1] ^	1.1	U	ug/L	1	1.1	5.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
Benzene [71-43-2] ^	0.27	U	ug/L	1	0.27	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
Bromobenzene [108-86-1] ^	0.26	U	ug/L	1	0.26	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
Bromochloromethane [74-97-5] ^	0.28	U	ug/L	1	0.28	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
Bromodichloromethane [75-27-4] ^	0.20	U	ug/L	1	0.20	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
Bromoform [75-25-2] ^	0.33	U	ug/L	1	0.33	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
Bromomethane [74-83-9] ^	0.64	U	ug/L	1	0.64	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
Carbon disulfide [75-15-0] ^	0.24	U	ug/L	1	0.24	5.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
Carbon tetrachloride [56-23-5] ^	0.20	U	ug/L	1	0.20	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
Chlorobenzene [108-90-7] ^	0.24	U	ug/L	1	0.24	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
<b>Chloroethane [75-00-3] ^</b>	<b>5.4</b>		ug/L	1	0.31	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
Chloroform [67-66-3] ^	0.21	U	ug/L	1	0.21	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
Chloromethane [74-87-3] ^	0.31	U	ug/L	1	0.31	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
<b>cis-1,2-Dichloroethene [156-59-2] ^</b>	<b>16</b>		ug/L	1	0.22	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
cis-1,3-Dichloropropene [10061-01-5] ^	0.35	U	ug/L	1	0.35	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
Dibromochloromethane [124-48-1] ^	0.27	U	ug/L	1	0.27	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
Dichlorodifluoromethane [75-71-8] ^	0.29	U	ug/L	1	0.29	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
Ethylbenzene [100-41-4] ^	0.26	U	ug/L	1	0.26	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
Hexachlorobutadiene [87-68-3] ^	0.35	U	ug/L	1	0.35	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
Isopropylbenzene [98-82-8] ^	0.20	U	ug/L	1	0.20	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
m,p-Xylenes [108-38-3/106-42-3] ^	0.50	U	ug/L	1	0.50	2.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
Methylene chloride [75-09-2] ^	0.62	U	ug/L	1	0.62	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	

**Description:** MW-10

**Lab Sample ID:** B101800-02

**Received:** 04/13/11 08:45

**Matrix:** Ground Water

**Sampled:** 04/12/11 14:00

**Work Order:** B101800

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Volatile Organic Compounds by GCMS**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Methyl-tert-Butyl Ether [1634-04-4] ^	0.24	U	ug/L	1	0.24	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
Naphthalene [91-20-3] ^	0.30	U	ug/L	1	0.30	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
n-Butyl Benzene [104-51-8] ^	0.28	U	ug/L	1	0.28	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
n-Propyl Benzene [103-65-1] ^	0.20	U	ug/L	1	0.20	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
o-Xylene [95-47-6] ^	0.25	U	ug/L	1	0.25	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
sec-Butylbenzene [135-98-8] ^	0.20	U	ug/L	1	0.20	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
Styrene [100-42-5] ^	0.32	U	ug/L	1	0.32	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
tert-Butylbenzene [98-06-6] ^	0.21	U	ug/L	1	0.21	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
<b>Tetrachloroethene [127-18-4] ^</b>	<b>1.7</b>		ug/L	<b>1</b>	0.21	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
Toluene [108-88-3] ^	0.30	U	ug/L	1	0.30	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
trans-1,2-Dichloroethene [156-60-5] ^	0.30	U	ug/L	1	0.30	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
trans-1,3-Dichloropropene [10061-02-6] ^	0.33	U	ug/L	1	0.33	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
<b>Trichloroethene [79-01-6] ^</b>	<b>4.8</b>		ug/L	<b>1</b>	0.24	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
Trichlorofluoromethane [75-69-4] ^	0.20	U	ug/L	1	0.20	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
Vinyl chloride [75-01-4] ^	0.33	U	ug/L	1	0.33	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
Xylenes (Total) [1330-20-7] ^	0.50	U	ug/L	1	0.50	1.0	1D12021	EPA 8260B	04/14/11 04:12	GMB	
<hr/>											
<b>Surrogates</b>	<b>Results</b>	<b>DF</b>	<b>Spike Lvl</b>	<b>% Rec</b>	<b>% Rec Limits</b>		<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
4-Bromofluorobenzene	47	1	50.0	95 %	62-132		1D12021	EPA 8260B	04/14/11 04:12	GMB	
4-Bromofluorobenzene	47	1	50.0	94 %	62-132		1D15011	EPA 8260B	04/15/11 22:41	GMB	
Dibromofluoromethane	52	1	50.0	103 %	73-134		1D12021	EPA 8260B	04/14/11 04:12	GMB	
Dibromofluoromethane	56	1	50.0	112 %	73-134		1D15011	EPA 8260B	04/15/11 22:41	GMB	
Toluene-d8	52	1	50.0	103 %	66-138		1D12021	EPA 8260B	04/14/11 04:12	GMB	
Toluene-d8	56	1	50.0	112 %	66-138		1D15011	EPA 8260B	04/15/11 22:41	GMB	

**Description:** MW-10**Matrix:** Ground Water**Project:** Cooper Tools**Lab Sample ID:** B101800-02**Sampled:** 04/12/11 14:00**Sampled By:** Danny Hefner**Received:** 04/13/11 08:45**Work Order:** B101800**Metals by EPA 6000/7000 Series Methods**

^ - ENCO Jacksonville certified analyte [NC 442]

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>POL</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
Mercury [7439-97-6] ^	0.0720	U	ug/L	1	0.0720	0.200	1D18013	EPA 7470A	04/20/11 09:59	LTS	

**Description:** MW-10

**Lab Sample ID:** B101800-02

**Received:** 04/13/11 08:45

**Matrix:** Ground Water

**Sampled:** 04/12/11 14:00

**Work Order:** B101800

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Metals (total recoverable) by EPA 6000/7000 Series Methods**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>POL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Arsenic [7440-38-2] ^	6.70	U	ug/L	1	6.70	10.0	1D15004	EPA 6010C	04/18/11 13:52	ACV	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1D15004	EPA 6010C	04/18/11 13:52	ACV	
Cadmium [7440-43-9] ^	0.370	U	ug/L	1	0.370	1.00	1D15004	EPA 6010C	04/18/11 13:52	ACV	
Chromium [7440-47-3] ^	1.93	I	ug/L	1	1.30	10.0	1D15004	EPA 6010C	04/18/11 13:52	ACV	
Copper [7440-50-8] ^	1.79	I	ug/L	1	1.50	10.0	1D15004	EPA 6010C	04/18/11 13:52	ACV	
Lead [7439-92-1] ^	2.90	U	ug/L	1	2.90	10.0	1D15004	EPA 6010C	04/18/11 13:52	ACV	
Nickel [7440-02-0] ^	1.90	I	ug/L	1	1.10	10.0	1D15004	EPA 6010C	04/18/11 13:52	ACV	
Selenium [7782-49-2] ^	8.90	U	ug/L	1	8.90	10.0	1D15004	EPA 6010C	04/18/11 13:52	ACV	
Silver [7440-22-4] ^	1.50	U	ug/L	1	1.50	10.0	1D15004	EPA 6010C	04/18/11 13:52	ACV	
Zinc [7440-66-6] ^	3.98	IV	ug/L	1	3.50	10.0	1D15004	EPA 6010C	04/18/11 13:52	ACV	J-01

**Description:** MW-10

**Lab Sample ID:** B101800-02

**Received:** 04/13/11 08:45

**Matrix:** Ground Water

**Sampled:** 04/12/11 14:00

**Work Order:** B101800

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Metals (total recoverable) by EPA 6000/7000 Series Methods**
<sup>^</sup> - ENCO Cary certified analyte [NC 591]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Antimony [7440-36-0] ^	0.220	U	ug/L	1	0.220	2.00	1D14028	EPA 6020A	04/18/11 10:45	VLO	
Thallium [7440-28-0] ^	0.206	I	ug/L	1	0.110	1.00	1D14028	EPA 6020A	04/18/11 10:45	VLO	

**Description:** MW-11

**Lab Sample ID:** B101800-03

**Received:** 04/13/11 08:45

**Matrix:** Ground Water

**Sampled:** 04/12/11 09:10

**Work Order:** B101800

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Volatile Organic Compounds by GCMS**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>POL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.20	U	ug/L	1	0.20	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
1,1,1-Trichloroethane [71-55-6] ^	<b>1.5</b>		ug/L	1	0.20	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.32	U	ug/L	1	0.32	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
1,1,2-Trichloroethane [79-00-5] ^	0.40	U	ug/L	1	0.40	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
1,1-Dichloroethane [75-34-3] ^	<b>12</b>		ug/L	1	0.30	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
1,1-Dichloroethene [75-35-4] ^	<b>8.7</b>		ug/L	1	0.21	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
1,1-Dichloropropene [563-59-6] ^	0.21	U	ug/L	1	0.21	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
1,2,3-Trichlorobenzene [87-61-6] ^	0.50	U	ug/L	1	0.50	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
1,2,3-Trichloropropane [96-18-4] ^	0.30	U	ug/L	1	0.30	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
1,2,4-Trichlorobenzene [120-82-1] ^	0.41	U	ug/L	1	0.41	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
1,2,4-Trimethylbenzene [95-63-6] ^	0.28	U	ug/L	1	0.28	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.60	U	ug/L	1	0.60	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
1,2-Dibromoethane [106-93-4] ^	0.27	U	ug/L	1	0.27	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
1,2-Dichlorobenzene [95-50-1] ^	0.24	U	ug/L	1	0.24	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
1,2-Dichloroethane [107-06-2] ^	0.28	U	ug/L	1	0.28	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
1,2-Dichloropropane [78-87-5] ^	0.30	U	ug/L	1	0.30	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
1,3,5-Trimethylbenzene [108-67-8] ^	0.26	U	ug/L	1	0.26	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
1,3-Dichlorobenzene [541-73-1] ^	0.27	U	ug/L	1	0.27	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
1,3-Dichloropropane [142-28-9] ^	0.25	U	ug/L	1	0.25	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
1,4-Dichlorobenzene [106-46-7] ^	0.23	U	ug/L	1	0.23	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
2,2-Dichloropropane [594-20-7] ^	0.40	U	ug/L	1	0.40	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
2-Butanone [78-93-3] ^	0.38	U	ug/L	1	0.38	5.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
2-Chloroethyl Vinyl Ether [110-75-8] ^	1.5	U	ug/L	1	1.5	5.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
2-Chlorotoluene [95-49-8] ^	0.33	U	ug/L	1	0.33	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
2-Hexanone [591-78-6] ^	0.50	U	ug/L	1	0.50	5.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
4-Chlorotoluene [106-43-4] ^	0.22	U	ug/L	1	0.22	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
4-Isopropyltoluene [99-87-6] ^	0.29	U	ug/L	1	0.29	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
4-Methyl-2-pentanone [108-10-1] ^	1.0	U	ug/L	1	1.0	5.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
Acetone [67-64-1] ^	1.1	U	ug/L	1	1.1	5.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
Benzene [71-43-2] ^	0.27	U	ug/L	1	0.27	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
Bromobenzene [108-86-1] ^	0.26	U	ug/L	1	0.26	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
Bromochloromethane [74-97-5] ^	0.28	U	ug/L	1	0.28	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
Bromodichloromethane [75-27-4] ^	0.20	U	ug/L	1	0.20	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
Bromoform [75-25-2] ^	0.33	U	ug/L	1	0.33	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
Bromomethane [74-83-9] ^	0.64	U	ug/L	1	0.64	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
<b>Carbon disulfide [75-15-0] ^</b>	<b>0.39</b>	<b>IV</b>	<b>ug/L</b>	<b>1</b>	<b>0.24</b>	<b>5.0</b>	<b>1D12021</b>	<b>EPA 8260B</b>	<b>04/14/11 07:27</b>	<b>GMB</b>	J-01
Carbon tetrachloride [56-23-5] ^	0.20	U	ug/L	1	0.20	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
Chlorobenzene [108-90-7] ^	0.24	U	ug/L	1	0.24	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
Chloroethane [75-00-3] ^	0.31	U	ug/L	1	0.31	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
<b>Chloroform [67-66-3] ^</b>	<b>2.1</b>		<b>ug/L</b>	<b>1</b>	<b>0.21</b>	<b>1.0</b>	<b>1D12021</b>	<b>EPA 8260B</b>	<b>04/14/11 07:27</b>	<b>GMB</b>	
Chloromethane [74-87-3] ^	0.31	U	ug/L	1	0.31	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
<b>cis-1,2-Dichloroethene [156-59-2] ^</b>	<b>0.63</b>	<b>I</b>	<b>ug/L</b>	<b>1</b>	<b>0.22</b>	<b>1.0</b>	<b>1D12021</b>	<b>EPA 8260B</b>	<b>04/14/11 07:27</b>	<b>GMB</b>	
<b>cis-1,3-Dichloropropene [10061-01-5] ^</b>	<b>0.35</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	<b>0.35</b>	<b>1.0</b>	<b>1D12021</b>	<b>EPA 8260B</b>	<b>04/14/11 07:27</b>	<b>GMB</b>	
Dibromochloromethane [124-48-1] ^	0.27	U	ug/L	1	0.27	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
Dichlorodifluoromethane [75-71-8] ^	0.29	U	ug/L	1	0.29	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
Ethylbenzene [100-41-4] ^	0.26	U	ug/L	1	0.26	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
Hexachlorobutadiene [87-68-3] ^	0.35	U	ug/L	1	0.35	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
Isopropylbenzene [98-82-8] ^	0.20	U	ug/L	1	0.20	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
m,p-Xylenes [108-38-3/106-42-3] ^	0.50	U	ug/L	1	0.50	2.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
Methylene chloride [75-09-2] ^	0.62	U	ug/L	1	0.62	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	

**Description:** MW-11

**Lab Sample ID:** B101800-03

**Received:** 04/13/11 08:45

**Matrix:** Ground Water

**Sampled:** 04/12/11 09:10

**Work Order:** B101800

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Volatile Organic Compounds by GCMS**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>POL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Methyl-tert-Butyl Ether [1634-04-4] ^	0.24	U	ug/L	1	0.24	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
Naphthalene [91-20-3] ^	0.30	U	ug/L	1	0.30	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
n-Butyl Benzene [104-51-8] ^	0.28	U	ug/L	1	0.28	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
n-Propyl Benzene [103-65-1] ^	0.20	U	ug/L	1	0.20	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
o-Xylene [95-47-6] ^	0.25	U	ug/L	1	0.25	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
sec-Butylbenzene [135-98-8] ^	0.20	U	ug/L	1	0.20	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
Styrene [100-42-5] ^	0.32	U	ug/L	1	0.32	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
tert-Butylbenzene [98-06-6] ^	0.21	U	ug/L	1	0.21	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
Tetrachloroethene [127-18-4] ^	0.21	U	ug/L	1	0.21	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
Toluene [108-88-3] ^	0.30	U	ug/L	1	0.30	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
trans-1,2-Dichloroethene [156-60-5] ^	0.30	U	ug/L	1	0.30	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
trans-1,3-Dichloropropene [10061-02-6] ^	0.33	U	ug/L	1	0.33	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
Trichloroethene [79-01-6] ^	0.24	U	ug/L	1	0.24	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
Trichlorofluoromethane [75-69-4] ^	0.20	U	ug/L	1	0.20	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
Vinyl chloride [75-01-4] ^	0.33	U	ug/L	1	0.33	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
Xylenes (Total) [1330-20-7] ^	0.50	U	ug/L	1	0.50	1.0	1D12021	EPA 8260B	04/14/11 07:27	GMB	
<b>Surrogates</b>											
4-Bromofluorobenzene	44	1	50.0	88 %	62-132		1D12021	EPA 8260B	04/14/11 07:27	GMB	
Dibromofluoromethane	55	1	50.0	109 %	73-134		1D12021	EPA 8260B	04/14/11 07:27	GMB	
Toluene-d8	56	1	50.0	111 %	66-138		1D12021	EPA 8260B	04/14/11 07:27	GMB	

**Description:** MW-11**Lab Sample ID:** B101800-03**Received:** 04/13/11 08:45**Matrix:** Ground Water**Sampled:** 04/12/11 09:10**Work Order:** B101800**Project:** Cooper Tools**Sampled By:** Danny Hefner**Metals by EPA 6000/7000 Series Methods**

^ - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>POL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Mercury [7439-97-6] ^	0.0720	U	ug/L	1	0.0720	0.200	1D18013	EPA 7470A	04/20/11 10:00	LTS	

**Description:** MW-11

**Lab Sample ID:** B101800-03

**Received:** 04/13/11 08:45

**Matrix:** Ground Water

**Sampled:** 04/12/11 09:10

**Work Order:** B101800

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Metals (total recoverable) by EPA 6000/7000 Series Methods**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>PF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Arsenic [7440-38-2] ^	6.70	U	ug/L	1	6.70	10.0	1D15004	EPA 6010C	04/18/11 13:54	ACV	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1D15004	EPA 6010C	04/18/11 13:54	ACV	
Cadmium [7440-43-9] ^	0.370	U	ug/L	1	0.370	1.00	1D15004	EPA 6010C	04/18/11 13:54	ACV	
<b>Chromium [7440-47-3] ^</b>	<b>18.3</b>		ug/L	1	1.30	10.0	1D15004	EPA 6010C	04/18/11 13:54	ACV	
Copper [7440-50-8] ^	1.50	U	ug/L	1	1.50	10.0	1D15004	EPA 6010C	04/18/11 13:54	ACV	
Lead [7439-92-1] ^	2.90	U	ug/L	1	2.90	10.0	1D15004	EPA 6010C	04/18/11 13:54	ACV	
Nickel [7440-02-0] ^	1.96	I	ug/L	1	1.10	10.0	1D15004	EPA 6010C	04/18/11 13:54	ACV	
Selenium [7782-49-2] ^	8.90	U	ug/L	1	8.90	10.0	1D15004	EPA 6010C	04/18/11 13:54	ACV	
Silver [7440-22-4] ^	1.50	U	ug/L	1	1.50	10.0	1D15004	EPA 6010C	04/18/11 13:54	ACV	
Zinc [7440-66-6] ^	62.2	V	ug/L	1	3.50	10.0	1D15004	EPA 6010C	04/18/11 13:54	ACV	J-01

**Description:** MW-11

**Lab Sample ID:** B101800-03

**Received:** 04/13/11 08:45

**Matrix:** Ground Water

**Sampled:** 04/12/11 09:10

**Work Order:** B101800

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Metals (total recoverable) by EPA 6000/7000 Series Methods**
<sup>^</sup> - ENCO Cary certified analyte [NC 591]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>POL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Antimony [7440-36-0] ^	0.220	U	ug/L	1	0.220	2.00	1D14028	EPA 6020A	04/18/11 10:49	VLO	
Thallium [7440-28-0] ^	<b>0.211</b>	I	ug/L	1	0.110	1.00	1D14028	EPA 6020A	04/18/11 10:49	VLO	

**Description:** MW-6

**Lab Sample ID:** B101800-04

**Received:** 04/13/11 08:45

**Matrix:** Ground Water

**Sampled:** 04/12/11 12:05

**Work Order:** B101800

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Volatile Organic Compounds by GCMS**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.20	U	ug/L	1	0.20	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
1,1,1-Trichloroethane [71-55-6] ^	0.20	U	ug/L	1	0.20	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.32	U	ug/L	1	0.32	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
1,1,2-Trichloroethane [79-00-5] ^	0.40	U	ug/L	1	0.40	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
<b>1,1-Dichloroethane [75-34-3] ^</b>	<b>0.63</b>	<b>I</b>	<b>ug/L</b>	<b>1</b>	<b>0.30</b>	<b>1.0</b>	<b>1D15011</b>	<b>EPA 8260B</b>	<b>04/15/11 20:46</b>	<b>GMB</b>	
<b>1,1-Dichloroethene [75-35-4] ^</b>	<b>18</b>		<b>ug/L</b>	<b>1</b>	<b>0.21</b>	<b>1.0</b>	<b>1D15011</b>	<b>EPA 8260B</b>	<b>04/15/11 20:46</b>	<b>GMB</b>	
1,1-Dichloropropene [563-58-6] ^	0.21	U	ug/L	1	0.21	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
1,2,3-Trichlorobenzene [87-61-6] ^	0.50	U	ug/L	1	0.50	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
1,2,3-Trichloropropane [96-18-4] ^	0.30	U	ug/L	1	0.30	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
1,2,4-Trichlorobenzene [120-82-1] ^	0.41	U	ug/L	1	0.41	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
1,2,4-Trimethylbenzene [95-63-6] ^	0.28	U	ug/L	1	0.28	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.60	U	ug/L	1	0.60	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
1,2-Dibromoethane [106-93-4] ^	0.27	U	ug/L	1	0.27	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
1,2-Dichlorobenzene [95-50-1] ^	0.24	U	ug/L	1	0.24	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
1,2-Dichloroethane [107-06-2] ^	0.28	U	ug/L	1	0.28	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
1,2-Dichloropropane [78-87-5] ^	0.30	U	ug/L	1	0.30	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
1,3,5-Trimethylbenzene [108-67-8] ^	0.26	U	ug/L	1	0.26	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
1,3-Dichlorobenzene [541-73-1] ^	0.27	U	ug/L	1	0.27	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
1,3-Dichloropropane [142-28-9] ^	0.25	U	ug/L	1	0.25	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
1,4-Dichlorobenzene [106-46-7] ^	0.23	U	ug/L	1	0.23	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
2,2-Dichloropropane [594-20-7] ^	0.40	U	ug/L	1	0.40	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
2-Butanone [78-93-3] ^	0.38	U	ug/L	1	0.38	5.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
2-Chloroethyl Vinyl Ether [110-75-8] ^	1.5	U	ug/L	1	1.5	5.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
2-Chlorotoluene [95-49-8] ^	0.33	U	ug/L	1	0.33	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
2-Hexanone [591-78-6] ^	0.50	U	ug/L	1	0.50	5.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
4-Chlorotoluene [106-43-4] ^	0.22	U	ug/L	1	0.22	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
4-Isopropyltoluene [99-87-6] ^	0.29	U	ug/L	1	0.29	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
4-Methyl-2-pentanone [108-10-1] ^	1.0	U	ug/L	1	1.0	5.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
Acetone [67-64-1] ^	1.1	U	ug/L	1	1.1	5.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
Benzene [71-43-2] ^	0.27	U	ug/L	1	0.27	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
Bromobenzene [108-86-1] ^	0.26	U	ug/L	1	0.26	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
Bromochloromethane [74-97-5] ^	0.28	U	ug/L	1	0.28	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
Bromodichloromethane [75-27-4] ^	0.20	U	ug/L	1	0.20	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
Bromoform [75-25-2] ^	0.33	U	ug/L	1	0.33	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
Bromomethane [74-83-9] ^	0.64	U	ug/L	1	0.64	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
<b>Carbon disulfide [75-15-0] ^</b>	<b>0.55</b>	<b>IV</b>	<b>ug/L</b>	<b>1</b>	<b>0.24</b>	<b>5.0</b>	<b>1D15011</b>	<b>EPA 8260B</b>	<b>04/15/11 20:46</b>	<b>GMB</b>	J-01
Carbon tetrachloride [56-23-5] ^	0.20	U	ug/L	1	0.20	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
Chlorobenzene [108-90-7] ^	0.24	U	ug/L	1	0.24	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
Chloroethane [75-00-3] ^	0.31	U	ug/L	1	0.31	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
Chloroform [67-66-3] ^	0.21	U	ug/L	1	0.21	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
Chloromethane [74-87-3] ^	0.31	U	ug/L	1	0.31	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
<b>cis-1,2-Dichloroethene [156-59-2] ^</b>	<b>2.3</b>		<b>ug/L</b>	<b>1</b>	<b>0.22</b>	<b>1.0</b>	<b>1D15011</b>	<b>EPA 8260B</b>	<b>04/15/11 20:46</b>	<b>GMB</b>	
cis-1,3-Dichloropropene [10061-01-5] ^	0.35	U	ug/L	1	0.35	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
Dibromochloromethane [124-48-1] ^	0.27	U	ug/L	1	0.27	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
Dichlorodifluoromethane [75-71-8] ^	0.29	U	ug/L	1	0.29	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
Ethylbenzene [100-41-4] ^	0.26	U	ug/L	1	0.26	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
Hexachlorobutadiene [87-68-3] ^	0.35	U	ug/L	1	0.35	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
Isopropylbenzene [98-82-8] ^	0.20	U	ug/L	1	0.20	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
m,p-Xylenes [108-38-3/106-42-3] ^	0.50	U	ug/L	1	0.50	2.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
Methylene chloride [75-09-2] ^	0.62	U	ug/L	1	0.62	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	

**Description:** MW-6

**Lab Sample ID:** B101800-04

**Received:** 04/13/11 08:45

**Matrix:** Ground Water

**Sampled:** 04/12/11 12:05

**Work Order:** B101800

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

### Volatile Organic Compounds by GCMS

<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	POL	Batch	Method	Analyzed	By	Notes
Methyl-tert-Butyl Ether [1634-04-4] ^	0.24	U	ug/L	1	0.24	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
Naphthalene [91-20-3] ^	0.30	U	ug/L	1	0.30	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
n-Butyl Benzene [104-51-8] ^	0.28	U	ug/L	1	0.28	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
n-Propyl Benzene [103-65-1] ^	0.20	U	ug/L	1	0.20	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
o-Xylene [95-47-6] ^	0.25	U	ug/L	1	0.25	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
sec-Butylbenzene [135-98-8] ^	0.20	U	ug/L	1	0.20	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
Styrene [100-42-5] ^	0.32	U	ug/L	1	0.32	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
tert-Butylbenzene [98-06-6] ^	0.21	U	ug/L	1	0.21	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
<b>Tetrachloroethene [127-18-4] ^</b>	<b>22</b>		ug/L	1	0.21	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
Toluene [108-88-3] ^	0.30	U	ug/L	1	0.30	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
trans-1,2-Dichloroethene [156-60-5] ^	0.30	U	ug/L	1	0.30	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
trans-1,3-Dichloropropene [10061-02-6] ^	0.33	U	ug/L	1	0.33	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
<b>Trichloroethene [79-01-6] ^</b>	<b>8.8</b>		ug/L	1	0.24	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
Trichlorofluoromethane [75-69-4] ^	0.20	U	ug/L	1	0.20	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
Vinyl chloride [75-01-4] ^	0.33	U	ug/L	1	0.33	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
Xylenes (Total) [1330-20-7] ^	0.50	U	ug/L	1	0.50	1.0	1D15011	EPA 8260B	04/15/11 20:46	GMB	
<hr/>											
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits		Batch	Method	Analyzed	By	Notes
4-Bromofluorobenzene	45	1	50.0	89 %	62-132		1D15011	EPA 8260B	04/15/11 20:46	GMB	
Dibromofluoromethane	53	1	50.0	106 %	73-134		1D15011	EPA 8260B	04/15/11 20:46	GMB	
Toluene-d8	52	1	50.0	104 %	66-138		1D15011	EPA 8260B	04/15/11 20:46	GMB	

**Description:** MW-6

**Lab Sample ID:** B101800-04

**Received:** 04/13/11 08:45

**Matrix:** Ground Water

**Sampled:** 04/12/11 12:05

**Work Order:** B101800

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Non-Halogenated Volatile Organics by GC**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Ethylene Glycol [107-21-1] ^	4.1	U	mg/L	1	4.1	10	1D15008	EPA 8015C	04/15/11 13:03	LAC	
Propylene Glycol [57-55-6] ^	1.8	U	mg/L	1	1.8	10	1D15008	EPA 8015C	04/15/11 13:03	LAC	
<b>Surrogates</b>	<b>Results</b>	<b>DF</b>	<b>Spike Lvl</b>	<b>% Rec</b>	<b>% Rec Limits</b>		<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
1,3-Butylene Glycol	110	1	99.7	111 %	50-150		1D15008	EPA 8015C	04/15/11 13:03	LAC	

**Description:** MW-6

**Lab Sample ID:** B101800-04

**Received:** 04/13/11 08:45

**Matrix:** Ground Water

**Sampled:** 04/12/11 12:05

**Work Order:** B101800

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Diesel Range Organics by GC**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
DRO (C10-C28) [ECL-0057] ^	0.033	IV	mg/L	1	0.024	0.10	1D13022	EPA 8015C	04/15/11 00:15	JSW	J-01
<b>Surrogates</b>	<b>Results</b>	<b>DF</b>	<b>Spike Lvl</b>	<b>% Rec</b>	<b>% Rec Limits</b>		<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
<i>o-Terphenyl</i>	0.00028	1	0.0500	0.6 %	63-139		1D13022	EPA 8015C	04/15/11 00:15	JSW	QS-05

**Description:** MW-6**Lab Sample ID:** B101800-04**Received:** 04/13/11 08:45**Matrix:** Ground Water**Sampled:** 04/12/11 12:05**Work Order:** B101800**Project:** Cooper Tools**Sampled By:** Danny Hefner**Metals by EPA 6000/7000 Series Methods**

^ - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>POL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Mercury [7439-97-6] ^	0.720	U	ug/L	1	0.720	2.00	1D18013	EPA 7470A	04/20/11 10:02	LTS	

**Description:** MW-6

**Lab Sample ID:** B101800-04

**Received:** 04/13/11 08:45

**Matrix:** Ground Water

**Sampled:** 04/12/11 12:05

**Work Order:** B101800

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Metals (total recoverable) by EPA 6000/7000 Series Methods**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Arsenic [7440-38-2] ^	821		ug/L	10	67.0	100	1D15004	EPA 6010C	04/19/11 11:10	ACV	
Beryllium [7440-41-7] ^	31.0		ug/L	10	1.00	10.0	1D15004	EPA 6010C	04/19/11 11:10	ACV	
Cadmium [7440-43-9] ^	3.70	U	ug/L	10	3.70	10.0	1D15004	EPA 6010C	04/19/11 11:10	ACV	
Chromium [7440-47-3] ^	234		ug/L	10	13.0	100	1D15004	EPA 6010C	04/19/11 11:10	ACV	
Copper [7440-50-8] ^	919		ug/L	10	15.0	100	1D15004	EPA 6010C	04/19/11 11:10	ACV	
Lead [7439-92-1] ^	1860		ug/L	10	29.0	100	1D15004	EPA 6010C	04/19/11 11:10	ACV	
Nickel [7440-02-0] ^	87.6	I	ug/L	10	11.0	100	1D15004	EPA 6010C	04/19/11 11:10	ACV	
Selenium [7782-49-2] ^	89.0	U	ug/L	10	89.0	100	1D15004	EPA 6010C	04/19/11 11:10	ACV	
Silver [7440-22-4] ^	15.0	U	ug/L	10	15.0	100	1D15004	EPA 6010C	04/19/11 11:10	ACV	
Zinc [7440-66-6] ^	227	V	ug/L	10	35.0	100	1D15004	EPA 6010C	04/19/11 11:10	ACV	QB-01

**Description:** MW-6

**Matrix:** Ground Water

**Project:** Cooper Tools

**Lab Sample ID:** B101800-04

**Received:** 04/13/11 08:45

**Sampled:** 04/12/11 12:05

**Work Order:** B101800

**Sampled By:** Danny Hefner

### **Classical Chemistry Parameters**

<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>POL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Hexavalent Chromium [1854-02-99] ^	0.004	U	mg/L	1	0.004	0.030	1D13002	SM18 3500 Cr-D	04/13/11 11:45	PJG	QV-01
Oil & Grease (HEM) [C-0007] ^	3.00	U	mg/L	1	3.00	5.00	1D14007	EPA 1664A	04/18/11 10:43	MJF	

**Description:** MW-6

**Lab Sample ID:** B101800-04

**Received:** 04/13/11 08:45

**Matrix:** Ground Water

**Sampled:** 04/12/11 12:05

**Work Order:** B101800

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Gasoline Range Organics by GC**
<sup>^</sup> - ENCO Cary certified analyte [NC 591]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
GRO (C6-C10) [ECL-0069] ^	0.016	I	mg/L	1	0.011	0.055	1D18016	EPA 8015C	04/18/11 15:07	bpk	
<b>Surrogates</b>											
2,5-Dibromotoluene	0.0794	I	0.100	79 %	70-130		1D18016	EPA 8015C	04/18/11 15:07	bpk	Notes

**Description:** MW-6

**Lab Sample ID:** B101800-04

**Received:** 04/13/11 08:45

**Matrix:** Ground Water

**Sampled:** 04/12/11 12:05

**Work Order:** B101800

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Metals (total recoverable) by EPA 6000/7000 Series Methods**
<sup>^</sup> - ENCO Cary certified analyte [NC 591]

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
Antimony [7440-36-0] ^	0.354	I	ug/L	1	0.220	2.00	1D14028	EPA 6020A	04/18/11 10:52	VLO	
Thallium [7440-28-0] ^	0.275	I	ug/L	1	0.110	1.00	1D14028	EPA 6020A	04/18/11 10:52	VLO	



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**Description:** MW-6D**Lab Sample ID:** B101800-05**Received:** 04/13/11 08:45**Matrix:** Ground Water**Sampled:** 04/12/11 12:20**Work Order:** B101800**Project:** Cooper Tools**Sampled By:** Danny Hefner**Volatile Organic Compounds by GCMS**

^ - ENCO Jacksonville certified analyte [NC 442]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	POL	Batch	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.20	U	ug/L	1	0.20	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
1,1,1-Trichloroethane [71-55-6] ^	0.20	U	ug/L	1	0.20	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.32	U	ug/L	1	0.32	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
1,1,2-Trichloroethane [79-00-5] ^	0.40	U	ug/L	1	0.40	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
<b>1,1-Dichloroethane [75-34-3] ^</b>	<b>0.76</b>	<b>I</b>	ug/L	1	0.30	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
<b>1,1-Dichloroethene [75-35-4] ^</b>	<b>19</b>		ug/L	1	0.21	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
1,1-Dichloropropene [563-58-6] ^	0.21	U	ug/L	1	0.21	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
1,2,3-Trichlorobenzene [87-61-6] ^	0.50	U	ug/L	1	0.50	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
1,2,3-Trichloropropane [96-18-4] ^	0.30	U	ug/L	1	0.30	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
1,2,4-Trichlorobenzene [120-82-1] ^	0.41	U	ug/L	1	0.41	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
1,2,4-Trimethylbenzene [95-63-6] ^	0.28	U	ug/L	1	0.28	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.60	U	ug/L	1	0.60	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
1,2-Dibromoethane [106-93-4] ^	0.27	U	ug/L	1	0.27	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
1,2-Dichlorobenzene [95-50-1] ^	0.24	U	ug/L	1	0.24	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
1,2-Dichloroethane [107-06-2] ^	0.28	U	ug/L	1	0.28	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
1,2-Dichloropropane [78-87-5] ^	0.30	U	ug/L	1	0.30	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
1,3,5-Trimethylbenzene [108-67-8] ^	0.26	U	ug/L	1	0.26	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
1,3-Dichlorobenzene [541-73-1] ^	0.27	U	ug/L	1	0.27	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
1,3-Dichloropropane [142-28-9] ^	0.25	U	ug/L	1	0.25	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
1,4-Dichlorobenzene [106-46-7] ^	0.23	U	ug/L	1	0.23	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
2,2-Dichloropropane [594-20-7] ^	0.40	U	ug/L	1	0.40	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
2-Butanone [78-93-3] ^	0.38	U	ug/L	1	0.38	5.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
2-Chloroethyl Vinyl Ether [110-75-8] ^	1.5	U	ug/L	1	1.5	5.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
2-Chlorotoluene [95-49-8] ^	0.33	U	ug/L	1	0.33	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
2-Hexanone [591-78-6] ^	0.50	U	ug/L	1	0.50	5.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
4-Chlorotoluene [106-43-4] ^	0.22	U	ug/L	1	0.22	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
4-Isopropyltoluene [99-87-6] ^	0.29	U	ug/L	1	0.29	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
4-Methyl-2-pentanone [108-10-1] ^	1.0	U	ug/L	1	1.0	5.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
Acetone [67-64-1] ^	1.1	U	ug/L	1	1.1	5.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
Benzene [71-43-2] ^	0.27	U	ug/L	1	0.27	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
Bromobenzene [108-86-1] ^	0.26	U	ug/L	1	0.26	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
Bromochloromethane [74-97-5] ^	0.28	U	ug/L	1	0.28	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
Bromodichloromethane [75-27-4] ^	0.20	U	ug/L	1	0.20	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
Bromoform [75-25-2] ^	0.33	U	ug/L	1	0.33	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
Bromomethane [74-83-9] ^	0.64	U	ug/L	1	0.64	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
<b>Carbon disulfide [75-15-0] ^</b>	<b>0.49</b>	<b>IV</b>	ug/L	1	0.24	5.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	J-01
Carbon tetrachloride [56-23-5] ^	0.20	U	ug/L	1	0.20	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
Chlorobenzene [108-90-7] ^	0.24	U	ug/L	1	0.24	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
Chloroethane [75-00-3] ^	0.31	U	ug/L	1	0.31	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
Chloroform [67-66-3] ^	0.21	U	ug/L	1	0.21	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
Chloromethane [74-87-3] ^	0.31	U	ug/L	1	0.31	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
<b>cis-1,2-Dichloroethene [156-59-2] ^</b>	<b>2.7</b>		ug/L	1	0.22	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
cis-1,3-Dichloropropene [10061-01-5] ^	0.35	U	ug/L	1	0.35	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
Dibromochloromethane [124-48-1] ^	0.27	U	ug/L	1	0.27	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
Dichlorodifluoromethane [75-71-8] ^	0.29	U	ug/L	1	0.29	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
Ethylbenzene [100-41-4] ^	0.26	U	ug/L	1	0.26	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
Hexachlorobutadiene [87-68-3] ^	0.35	U	ug/L	1	0.35	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
Isopropylbenzene [98-82-8] ^	0.20	U	ug/L	1	0.20	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
m,p-Xylenes [108-38-3/106-42-3] ^	0.50	U	ug/L	1	0.50	2.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
Methylene chloride [75-09-2] ^	0.62	U	ug/L	1	0.62	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	

**Description:** MW-6D

**Lab Sample ID:** B101800-05

**Received:** 04/13/11 08:45

**Matrix:** Ground Water

**Sampled:** 04/12/11 12:20

**Work Order:** B101800

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Volatile Organic Compounds by GCMS**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>POL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Methyl-tert-Butyl Ether [1634-04-4] ^	0.24	U	ug/L	1	0.24	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
Naphthalene [91-20-3] ^	0.30	U	ug/L	1	0.30	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
n-Butyl Benzene [104-51-8] ^	0.28	U	ug/L	1	0.28	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
n-Propyl Benzene [103-65-1] ^	0.20	U	ug/L	1	0.20	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
o-Xylene [95-47-6] ^	0.25	U	ug/L	1	0.25	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
sec-Butylbenzene [135-98-8] ^	0.20	U	ug/L	1	0.20	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
Styrene [100-42-5] ^	0.32	U	ug/L	1	0.32	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
tert-Butylbenzene [98-06-6] ^	0.21	U	ug/L	1	0.21	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
<b>Tetrachloroethene [127-18-4] ^</b>	<b>23</b>		ug/L	1	0.21	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
Toluene [108-88-3] ^	0.30	U	ug/L	1	0.30	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
trans-1,2-Dichloroethene [156-60-5] ^	0.30	U	ug/L	1	0.30	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
trans-1,3-Dichloropropene [10061-02-6] ^	0.33	U	ug/L	1	0.33	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
<b>Trichloroethene [79-01-6] ^</b>	<b>9.0</b>		ug/L	1	0.24	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
Trichlorofluoromethane [75-69-4] ^	0.20	U	ug/L	1	0.20	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
Vinyl chloride [75-01-4] ^	0.33	U	ug/L	1	0.33	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
Xylenes (Total) [1330-20-7] ^	0.50	U	ug/L	1	0.50	1.0	1D15011	EPA 8260B	04/15/11 21:14	GMB	
<b>Surrogates</b>											
4-Bromofluorobenzene	45	I	50.0	91 %	62-132		1D15011	EPA 8260B	04/15/11 21:14	GMB	
Dibromofluoromethane	55	I	50.0	110 %	73-134		1D15011	EPA 8260B	04/15/11 21:14	GMB	
Toluene-d8	53	I	50.0	106 %	66-138		1D15011	EPA 8260B	04/15/11 21:14	GMB	

**Description:** MW-6D

**Lab Sample ID:** B101800-05

**Received:** 04/13/11 08:45

**Matrix:** Ground Water

**Sampled:** 04/12/11 12:20

**Work Order:** B101800

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Non-Halogenated Volatile Organics by GC**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Ethylene Glycol [107-21-1] ^	4.1	U	mg/L	1	4.1	10	1D15008	EPA 8015C	04/15/11 13:14	LAC	
Propylene Glycol [57-55-6] ^	1.8	U	mg/L	1	1.8	10	1D15008	EPA 8015C	04/15/11 13:14	LAC	
<b>Surrogates</b>	<b>Results</b>	<b>DF</b>	<b>Spike Lvl</b>	<b>% Rec</b>	<b>% Rec Limits</b>		<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
1,3-Butylene Glycol	210	1	199	106 %	50-150		1D15008	EPA 8015C	04/15/11 13:14	LAC	

**Description:** MW-6D

**Lab Sample ID:** B101800-05

**Received:** 04/13/11 08:45

**Matrix:** Ground Water

**Sampled:** 04/12/11 12:20

**Work Order:** B101800

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Diesel Range Organics by GC**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
DRO (C10-C28) [ECL-0057] ^	0.034	IV	mg/L	1	0.024	0.10	1D13022	EPA 8015C	04/15/11 00:38	JSW	J-01
<b>Surrogates</b>											
<i>o-Terphenyl</i>	0.00026	1	0.0500	0.5 %	63-139		1D13022	EPA 8015C	04/15/11 00:38	JSW	QS-05

**Description:** MW-6D**Lab Sample ID:** B101800-05**Received:** 04/13/11 08:45**Matrix:** Ground Water**Sampled:** 04/12/11 12:20**Work Order:** B101800**Project:** Cooper Tools**Sampled By:** Danny Hefner**Metals by EPA 6000/7000 Series Methods**

^ - ENCO Jacksonville certified analyte [NC 442]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	POL	Batch	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	0.748	1	ug/L	1	0.720	2.00	1D18013	EPA 7470A	04/20/11 10:07	LTS	

**Description:** MW-6D

**Lab Sample ID:** B101800-05

**Received:** 04/13/11 08:45

**Matrix:** Ground Water

**Sampled:** 04/12/11 12:20

**Work Order:** B101800

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Metals (total recoverable) by EPA 6000/7000 Series Methods**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>POI</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Arsenic [7440-38-2] ^	914		ug/L	10	67.0	100	1D15004	EPA 6010C	04/19/11 11:12	ACV	
Beryllium [7440-41-7] ^	33.4		ug/L	10	1.00	10.0	1D15004	EPA 6010C	04/19/11 11:12	ACV	
Cadmium [7440-43-9] ^	3.70	U	ug/L	10	3.70	10.0	1D15004	EPA 6010C	04/19/11 11:12	ACV	
Chromium [7440-47-3] ^	269		ug/L	10	13.0	100	1D15004	EPA 6010C	04/19/11 11:12	ACV	
Copper [7440-50-8] ^	1000		ug/L	10	15.0	100	1D15004	EPA 6010C	04/19/11 11:12	ACV	
Lead [7439-92-1] ^	1990		ug/L	10	29.0	100	1D15004	EPA 6010C	04/19/11 11:12	ACV	
Nickel [7440-02-0] ^	103		ug/L	10	11.0	100	1D15004	EPA 6010C	04/19/11 11:12	ACV	
Selenium [7782-49-2] ^	89.0	U	ug/L	10	89.0	100	1D15004	EPA 6010C	04/19/11 11:12	ACV	
Silver [7440-22-4] ^	15.0	U	ug/L	10	15.0	100	1D15004	EPA 6010C	04/19/11 11:12	ACV	
Zinc [7440-66-6] ^	240	V	ug/L	10	35.0	100	1D15004	EPA 6010C	04/19/11 11:12	ACV	QB-01

**Description:** MW-6D

**Lab Sample ID:** B101800-05

**Received:** 04/13/11 08:45

**Matrix:** Ground Water

**Sampled:** 04/12/11 12:20

**Work Order:** B101800

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

### **Classical Chemistry Parameters**

*^ - ENCO Jacksonville certified analyte [NC 442]*

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>POL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Hexavalent Chromium [1854-02-99] ^	0.004	U	mg/L	1	0.004	0.030	1D13002	SM18 3500 Cr-D	04/13/11 11:45	PJG	QV-01
Oil & Grease (HEM) [C-0007] ^	3.00	U	mg/L	1	3.00	5.00	1D14007	EPA 1664A	04/18/11 10:43	MJF	

**Description:** MW-6D

**Lab Sample ID:** B101800-05

**Received:** 04/13/11 08:45

**Matrix:** Ground Water

**Sampled:** 04/12/11 12:20

**Work Order:** B101800

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Gasoline Range Organics by GC**
<sup>^ - ENCO Cary certified analyte [NC 591]</sup>

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>POL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
GRO (C6-C10) [ECL-0069] ^	0.016	I	mg/L	1	0.011	0.055	1D18016	EPA 8015C	04/18/11 15:38	bpk	
<b>Surrogates</b>											
2,5-Dibromotoluene	0.0788	1	0.100	79 %	70-130		1D18016	EPA 8015C	04/18/11 15:38	bpk	Notes

**Description:** MW-6D

**Lab Sample ID:** B101800-05

**Received:** 04/13/11 08:45

**Matrix:** Ground Water

**Sampled:** 04/12/11 12:20

**Work Order:** B101800

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Metals (total recoverable) by EPA 6000/7000 Series Methods**
*^ - ENCO Cary certified analyte [NC 591]*

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Antimony [7440-36-0] ^	0.375	I	ug/L	1	0.220	2.00	1D14028	EPA 6020A	04/18/11 11:05	VLO	
Thallium [7440-28-0] ^	0.259	I	ug/L	1	0.110	1.00	1D14028	EPA 6020A	04/18/11 11:05	VLO	



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**Description:** MW-7**Lab Sample ID:** B101800-06**Received:** 04/13/11 08:45**Matrix:** Ground Water**Sampled:** 04/12/11 12:40**Work Order:** B101800**Project:** Cooper Tools**Sampled By:** Danny Hefner**Volatile Organic Compounds by GCMS**<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	POL	Batch	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	1.0	U	ug/L	5	1.0	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
1,1,1-Trichloroethane [71-55-6] ^	1.0	U	ug/L	5	1.0	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
1,1,2,2-Tetrachloroethane [79-34-5] ^	1.6	U	ug/L	5	1.6	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
1,1,2-Trichloroethane [79-00-5] ^	2.0	U	ug/L	5	2.0	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
1,1-Dichloroethane [75-34-3] ^	1.5	U	ug/L	5	1.5	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
<b>1,1-Dichloroethene [75-35-4] ^</b>	<b>15</b>		ug/L	5	1.0	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
1,1-Dichloropropene [563-58-6] ^	1.0	U	ug/L	5	1.0	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
1,2,3-Trichlorobenzene [87-61-6] ^	2.5	U	ug/L	5	2.5	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
1,2,3-Trichloropropane [96-18-4] ^	1.5	U	ug/L	5	1.5	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
1,2,4-Trichlorobenzene [120-82-1] ^	2.0	U	ug/L	5	2.0	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
1,2,4-Trimethylbenzene [95-63-6] ^	1.4	U	ug/L	5	1.4	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
1,2-Dibromo-3-chloropropane [96-12-8] ^	3.0	U	ug/L	5	3.0	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
1,2-Dibromoethane [106-93-4] ^	1.4	U	ug/L	5	1.4	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
1,2-Dichlorobenzene [95-50-1] ^	1.2	U	ug/L	5	1.2	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
1,2-Dichloroethane [107-06-2] ^	1.4	U	ug/L	5	1.4	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
1,2-Dichloropropane [78-87-5] ^	1.5	U	ug/L	5	1.5	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
1,3,5-Trimethylbenzene [108-67-8] ^	1.3	U	ug/L	5	1.3	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
1,3-Dichlorobenzene [541-73-1] ^	1.4	U	ug/L	5	1.4	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
1,3-Dichloropropane [142-28-9] ^	1.2	U	ug/L	5	1.2	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
1,4-Dichlorobenzene [106-46-7] ^	1.2	U	ug/L	5	1.2	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
2,2-Dichloropropane [594-20-7] ^	2.0	U	ug/L	5	2.0	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
2-Butanone [78-93-3] ^	1.9	U	ug/L	5	1.9	25	1D15011	EPA 8260B	04/15/11 21:43	GMB	
2-Chloroethyl Vinyl Ether [110-75-8] ^	7.5	U	ug/L	5	7.5	25	1D15011	EPA 8260B	04/15/11 21:43	GMB	
2-Chlorotoluene [95-49-8] ^	1.6	U	ug/L	5	1.6	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
2-Hexanone [591-78-6] ^	2.5	U	ug/L	5	2.5	25	1D15011	EPA 8260B	04/15/11 21:43	GMB	
4-Chlorotoluene [106-43-4] ^	1.1	U	ug/L	5	1.1	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
4-Isopropyltoluene [99-87-6] ^	1.4	U	ug/L	5	1.4	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
4-Methyl-2-pentanone [108-10-1] ^	5.0	U	ug/L	5	5.0	25	1D15011	EPA 8260B	04/15/11 21:43	GMB	
Acetone [67-64-1] ^	5.5	U	ug/L	5	5.5	25	1D15011	EPA 8260B	04/15/11 21:43	GMB	
Benzene [71-43-2] ^	1.4	U	ug/L	5	1.4	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
Bromobenzene [108-86-1] ^	1.3	U	ug/L	5	1.3	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
Bromochloromethane [74-97-5] ^	1.4	U	ug/L	5	1.4	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
Bromodichloromethane [75-27-4] ^	1.0	U	ug/L	5	1.0	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
Bromoform [75-25-2] ^	1.6	U	ug/L	5	1.6	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
Bromomethane [74-83-9] ^	3.2	U	ug/L	5	3.2	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
<b>Carbon disulfide [75-15-0] ^</b>	<b>2.2</b>	<b>IV</b>	ug/L	5	1.2	25	1D15011	EPA 8260B	04/15/11 21:43	GMB	J-01
Carbon tetrachloride [56-23-5] ^	1.0	U	ug/L	5	1.0	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
Chlorobenzene [108-90-7] ^	1.2	U	ug/L	5	1.2	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
Chloroethane [75-00-3] ^	1.6	U	ug/L	5	1.6	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
Chloroform [67-66-3] ^	1.0	U	ug/L	5	1.0	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
Chloromethane [74-87-3] ^	1.6	U	ug/L	5	1.6	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
cis-1,2-Dichloroethene [156-59-2] ^	1.1	U	ug/L	5	1.1	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
cis-1,3-Dichloropropene [10061-01-5] ^	1.8	U	ug/L	5	1.8	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
Dibromochloromethane [124-48-1] ^	1.4	U	ug/L	5	1.4	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
Dibromomethane [74-95-3] ^	1.4	U	ug/L	5	1.4	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
Dichlorodifluoromethane [75-71-8] ^	1.4	U	ug/L	5	1.4	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
Ethylbenzene [100-41-4] ^	1.3	U	ug/L	5	1.3	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
Hexachlorobutadiene [87-68-3] ^	1.8	U	ug/L	5	1.8	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
Isopropylbenzene [98-82-8] ^	1.0	U	ug/L	5	1.0	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
m,p-Xylenes [108-38-3/106-42-3] ^	2.5	U	ug/L	5	2.5	10	1D15011	EPA 8260B	04/15/11 21:43	GMB	
Methylene chloride [75-09-2] ^	3.1	U	ug/L	5	3.1	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	

**Description:** MW-7

**Lab Sample ID:** B101800-06

**Received:** 04/13/11 08:45

**Matrix:** Ground Water

**Sampled:** 04/12/11 12:40

**Work Order:** B101800

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Volatile Organic Compounds by GCMS**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Methyl-tert-Butyl Ether [1634-04-4] ^	1.2	U	ug/L	5	1.2	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
Naphthalene [91-20-3] ^	1.5	U	ug/L	5	1.5	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
n-Butyl Benzene [104-51-8] ^	1.4	U	ug/L	5	1.4	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
n-Propyl Benzene [103-65-1] ^	1.0	U	ug/L	5	1.0	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
o-Xylene [95-47-6] ^	1.2	U	ug/L	5	1.2	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
sec-Butylbenzene [135-98-8] ^	1.0	U	ug/L	5	1.0	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
Styrene [100-42-5] ^	1.6	U	ug/L	5	1.6	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
tert-Butylbenzene [98-06-6] ^	1.0	U	ug/L	5	1.0	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
Tetrachloroethene [127-18-4] ^	230		ug/L	5	1.0	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
Toluene [108-88-3] ^	1.5	U	ug/L	5	1.5	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
trans-1,2-Dichloroethene [156-60-5] ^	1.5	U	ug/L	5	1.5	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
trans-1,3-Dichloropropene [10061-02-6] ^	1.6	U	ug/L	5	1.6	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
Trichloroethene [79-01-6] ^	1.2	U	ug/L	5	1.2	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
Trichlorofluoromethane [75-69-4] ^	1.0	U	ug/L	5	1.0	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
Vinyl chloride [75-01-4] ^	1.6	U	ug/L	5	1.6	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
Xylenes (Total) [1330-20-7] ^	2.5	U	ug/L	5	2.5	5.0	1D15011	EPA 8260B	04/15/11 21:43	GMB	
<hr/>											
<b>Surrogates</b>	<b>Results</b>	<b>DF</b>	<b>Spike Lvl</b>	<b>% Rec</b>	<b>% Rec Limits</b>		<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
4-Bromofluorobenzene	46	1	50.0	91 %	62-132		1D15011	EPA 8260B	04/15/11 21:43	GMB	
Dibromofluoromethane	54	1	50.0	107 %	73-134		1D15011	EPA 8260B	04/15/11 21:43	GMB	
Toluene-d8	54	1	50.0	107 %	66-138		1D15011	EPA 8260B	04/15/11 21:43	GMB	

**Description:** MW-7

**Lab Sample ID:** B101800-06

**Received:** 04/13/11 08:45

**Matrix:** Ground Water

**Sampled:** 04/12/11 12:40

**Work Order:** B101800

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Non-Halogenated Volatile Organics by GC**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Ethylene Glycol [107-21-1] ^	4.1	U	mg/L	1	4.1	10	1D15008	EPA 8015C	04/15/11 13:25	LAC	
Propylene Glycol [57-55-6] ^	1.8	U	mg/L	1	1.8	10	1D15008	EPA 8015C	04/15/11 13:25	LAC	
<b>Surrogates</b>	<b>Results</b>	<b>DF</b>	<b>Spike Lvl</b>	<b>% Rec</b>	<b>% Rec Limits</b>		<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
1,3-Butylene Glycol	110	1	99.7	115 %	50-150		1D15008	EPA 8015C	04/15/11 13:25	LAC	

**Description:** MW-7

**Lab Sample ID:** B101800-06

**Received:** 04/13/11 08:45

**Matrix:** Ground Water

**Sampled:** 04/12/11 12:40

**Work Order:** B101800

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Diesel Range Organics by GC**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
DRO (C10-C28) [ECL-0057] ^	0.034	IV	mg/L	1	0.024	0.10	1D13022	EPA 8015C	04/15/11 01:02	JSW	J-01
<b>Surrogates</b>											
<i>o-Terphenyl</i>	Results	DF	Spike Lvl	% Rec	% Rec Limits		Batch	Method	Analyzed	By	Notes
	0.00037	1	0.0500	0.7 %	63-139		1D13022	EPA 8015C	04/15/11 01:02	JSW	QS-05

**Description:** MW-7**Matrix:** Ground Water**Project:** Cooper Tools**Lab Sample ID:** B101800-06**Sampled:** 04/12/11 12:40**Received:** 04/13/11 08:45**Work Order:** B101800**Metals by EPA 6000/7000 Series Methods***^ - ENCO Jacksonville certified analyte [NC 442]*

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Mercury [7439-97-6] ^	0.0720	U	ug/L	1	0.0720	0.200	1D18013	EPA 7470A	04/20/11 10:09	LTS	

**Description:** MW-7

**Lab Sample ID:** B101800-06

**Received:** 04/13/11 08:45

**Matrix:** Ground Water

**Sampled:** 04/12/11 12:40

**Work Order:** B101800

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Metals (total recoverable) by EPA 6000/7000 Series Methods**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Arsenic [7440-38-2] ^	6.70	U	ug/L	1	6.70	10.0	1D15004	EPA 6010C	04/18/11 14:04	ACV	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1D15004	EPA 6010C	04/18/11 14:04	ACV	
Cadmium [7440-43-9] ^	<b>0.402</b>	I	ug/L	1	0.370	1.00	1D15004	EPA 6010C	04/18/11 14:04	ACV	
Chromium [7440-47-3] ^	1.30	U	ug/L	1	1.30	10.0	1D15004	EPA 6010C	04/18/11 14:04	ACV	
Copper [7440-50-8] ^	1.50	U	ug/L	1	1.50	10.0	1D15004	EPA 6010C	04/18/11 14:04	ACV	
Lead [7439-92-1] ^	2.90	U	ug/L	1	2.90	10.0	1D15004	EPA 6010C	04/18/11 14:04	ACV	
Nickel [7440-02-0] ^	1.10	U	ug/L	1	1.10	10.0	1D15004	EPA 6010C	04/18/11 14:04	ACV	
Selenium [7782-49-2] ^	8.90	U	ug/L	1	8.90	10.0	1D15004	EPA 6010C	04/18/11 14:04	ACV	
Silver [7440-22-4] ^	1.50	U	ug/L	1	1.50	10.0	1D15004	EPA 6010C	04/18/11 14:04	ACV	
Zinc [7440-66-6] ^	3.50	U	ug/L	1	3.50	10.0	1D15004	EPA 6010C	04/18/11 14:04	ACV	

**Description:** MW-7

**Lab Sample ID:** B101800-06

**Received:** 04/13/11 08:45

**Matrix:** Ground Water

**Sampled:** 04/12/11 12:40

**Work Order:** B101800

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

### **Classical Chemistry Parameters**

*^ - ENCO Jacksonville certified analyte [NC 442]*

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Hexavalent Chromium [1854-02-99] ^	0.004	U	mg/L	1	0.004	0.030	1D13002	SM18 3500 Cr-D	04/13/11 11:45	PJG	QV-01
Oil & Grease (HEM) [C-0007] ^	3.00	U	mg/L	1	3.00	5.00	1D14007	EPA 1664A	04/18/11 10:43	MJF	

**Description:** MW-7

**Lab Sample ID:** B101800-06

**Received:** 04/13/11 08:45

**Matrix:** Ground Water

**Sampled:** 04/12/11 12:40

**Work Order:** B101800

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Gasoline Range Organics by GC**
<sup>^</sup> - ENCO Cary certified analyte [NC 591]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
GRO (C6-C10) [ECL-0069] ^	0.097		mg/L	1	0.011	0.055	1D18016	EPA 8015C	04/18/11 16:10	bpk	
<b>Surrogates</b>											
2,5-Dibromotoluene	0.0775	1	0.100	78 %	70-130		1D18016	EPA 8015C	04/18/11 16:10	bpk	

**Description:** MW-7**Lab Sample ID:** B101800-06**Received:** 04/13/11 08:45**Matrix:** Ground Water**Sampled:** 04/12/11 12:40**Work Order:** B101800**Project:** Cooper Tools**Sampled By:** Danny Hefner**Metals (total recoverable) by EPA 6000/7000 Series Methods***^ - ENCO Cary certified analyte [NC 591]*

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Antimony [7440-36-0] ^	0.220	U	ug/L	1	0.220	2.00	1D14028	EPA 6020A	04/18/11 11:09	VLO	
Thallium [7440-28-0] ^	0.429	I	ug/L	1	0.110	1.00	1D14028	EPA 6020A	04/18/11 11:09	VLO	

**Description:** MW-8

**Lab Sample ID:** B101800-07

**Received:** 04/13/11 08:45

**Matrix:** Ground Water

**Sampled:** 04/12/11 14:50

**Work Order:** B101800

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Volatile Organic Compounds by GCMS**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
1,1,1,2-Tetrachloroethane [630-20-6] ^	2.0	U	ug/L	10	2.0	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
1,1,1-Trichloroethane [71-55-6] ^	2.0	U	ug/L	10	2.0	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
1,1,2,2-Tetrachloroethane [79-34-5] ^	3.2	U	ug/L	10	3.2	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
1,1,2-Trichloroethane [79-00-5] ^	4.0	U	ug/L	10	4.0	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
1,1-Dichloroethane [75-34-3] ^	3.0	U	ug/L	10	3.0	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
<b>1,1-Dichloroethene [75-35-4] ^</b>	<b>48</b>		ug/L	10	2.1	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
1,1-Dichloropropene [563-58-6] ^	2.1	U	ug/L	10	2.1	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
1,2,3-Trichlorobenzene [87-61-6] ^	5.0	U	ug/L	10	5.0	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
1,2,3-Trichloropropane [96-18-4] ^	3.0	U	ug/L	10	3.0	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
1,2,4-Trichlorobenzene [120-82-1] ^	4.1	U	ug/L	10	4.1	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
1,2,4-Trimethylbenzene [95-63-6] ^	2.8	U	ug/L	10	2.8	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
1,2-Dibromo-3-chloropropane [96-12-8] ^	6.0	U	ug/L	10	6.0	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
1,2-Dibromoethane [106-93-4] ^	2.7	U	ug/L	10	2.7	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
1,2-Dichlorobenzene [95-50-1] ^	2.4	U	ug/L	10	2.4	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
1,2-Dichloroethane [107-06-2] ^	2.8	U	ug/L	10	2.8	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
1,2-Dichloropropane [78-87-5] ^	3.0	U	ug/L	10	3.0	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
1,3,5-Trimethylbenzene [108-67-8] ^	2.6	U	ug/L	10	2.6	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
1,3-Dichlorobenzene [541-73-1] ^	2.7	U	ug/L	10	2.7	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
1,3-Dichloropropane [142-28-9] ^	2.5	U	ug/L	10	2.5	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
1,4-Dichlorobenzene [106-46-7] ^	2.3	U	ug/L	10	2.3	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
2,2-Dichloropropane [594-20-7] ^	4.0	U	ug/L	10	4.0	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
2-Butanone [78-93-3] ^	3.8	U	ug/L	10	3.8	50	1D12021	EPA 8260B	04/14/11 09:25	GMB	
2-Chloroethyl Vinyl Ether [110-75-8] ^	15	U	ug/L	10	15	50	1D12021	EPA 8260B	04/14/11 09:25	GMB	
2-Chlorotoluene [95-49-8] ^	3.3	U	ug/L	10	3.3	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
2-Hexanone [591-78-6] ^	5.0	U	ug/L	10	5.0	50	1D12021	EPA 8260B	04/14/11 09:25	GMB	
4-Chlorotoluene [106-43-4] ^	2.2	U	ug/L	10	2.2	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
4-Isopropyltoluene [99-87-6] ^	2.9	U	ug/L	10	2.9	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
4-Methyl-2-pentanone [108-10-1] ^	10	U	ug/L	10	10	.50	1D12021	EPA 8260B	04/14/11 09:25	GMB	
Acetone [67-64-1] ^	11	U	ug/L	10	11	.50	1D12021	EPA 8260B	04/14/11 09:25	GMB	
Benzene [71-43-2] ^	2.7	U	ug/L	10	2.7	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
Bromobenzene [108-86-1] ^	2.6	U	ug/L	10	2.6	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
Bromochloromethane [74-97-5] ^	2.8	U	ug/L	10	2.8	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
Bromodichloromethane [75-27-4] ^	2.0	U	ug/L	10	2.0	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
Bromoform [75-25-2] ^	3.3	U	ug/L	10	3.3	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
Bromomethane [74-83-9] ^	6.4	U	ug/L	10	6.4	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
Carbon disulfide [75-15-0] ^	2.4	U	ug/L	10	2.4	.50	1D12021	EPA 8260B	04/14/11 09:25	GMB	
Carbon tetrachloride [56-23-5] ^	2.0	U	ug/L	10	2.0	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
Chlorobenzene [108-90-7] ^	2.4	U	ug/L	10	2.4	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
Chloroethane [75-00-3] ^	3.1	U	ug/L	10	3.1	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
Chloroform [67-66-3] ^	2.1	U	ug/L	10	2.1	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
Chloromethane [74-87-3] ^	3.1	U	ug/L	10	3.1	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
<b>cis-1,2-Dichloroethene [156-59-2] ^</b>	<b>41</b>		ug/L	10	2.2	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
cis-1,3-Dichloropropene [10061-01-5] ^	3.5	U	ug/L	10	3.5	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
Dibromochloromethane [124-48-1] ^	2.7	U	ug/L	10	2.7	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
Dibromomethane [74-95-3] ^	2.7	U	ug/L	10	2.7	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
Dichlorodifluoromethane [75-71-8] ^	2.9	U	ug/L	10	2.9	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
Ethylbenzene [100-41-4] ^	2.6	U	ug/L	10	2.6	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
Hexachlorobutadiene [87-68-3] ^	3.5	U	ug/L	10	3.5	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
Isopropylbenzene [98-82-8] ^	2.0	U	ug/L	10	2.0	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
m,p-Xylenes [108-38-3/106-42-3] ^	5.0	U	ug/L	10	5.0	20	1D12021	EPA 8260B	04/14/11 09:25	GMB	
Methylene chloride [75-09-2] ^	6.2	U	ug/L	10	6.2	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	

**Description:** MW-8

**Lab Sample ID:** B101800-07

**Received:** 04/13/11 08:45

**Matrix:** Ground Water

**Sampled:** 04/12/11 14:50

**Work Order:** B101800

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Volatile Organic Compounds by GCMS**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Methyl-tert-Butyl Ether [1634-04-4] ^	2.4	U	ug/L	10	2.4	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
Naphthalene [91-20-3] ^	3.0	U	ug/L	10	3.0	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
n-Butyl Benzene [104-51-8] ^	2.8	U	ug/L	10	2.8	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
n-Propyl Benzene [103-65-1] ^	2.0	U	ug/L	10	2.0	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
o-Xylene [95-47-6] ^	2.5	U	ug/L	10	2.5	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
sec-Butylbenzene [135-98-8] ^	2.0	U	ug/L	10	2.0	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
Styrene [100-42-5] ^	3.2	U	ug/L	10	3.2	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
tert-Butylbenzene [98-06-6] ^	2.1	U	ug/L	10	2.1	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
<b>Tetrachloroethene [127-18-4] ^</b>	<b>6200</b>		ug/L	100	21	100	1D15011	EPA 8260B	04/15/11 23:39	GMB	
Toluene [108-88-3] ^	3.0	U	ug/L	10	3.0	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
trans-1,2-Dichloroethene [156-60-5] ^	3.0	U	ug/L	10	3.0	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
trans-1,3-Dichloropropene [10061-02-6] ^	3.3	U	ug/L	10	3.3	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
<b>Trichloroethene [79-01-6] ^</b>	<b>81</b>		ug/L	10	2.4	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
Trichlorofluoromethane [75-69-4] ^	2.0	U	ug/L	10	2.0	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
Vinyl chloride [75-01-4] ^	3.3	U	ug/L	10	3.3	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
Xylenes (Total) [1330-20-7] ^	5.0	U	ug/L	10	5.0	10	1D12021	EPA 8260B	04/14/11 09:25	GMB	
<b>Surrogates</b>											
4-Bromofluorobenzene	51	1	50.0	101 %	62-132		1D12021	EPA 8260B	04/14/11 09:25	GMB	
4-Bromofluorobenzene	44	1	50.0	89 %	62-132		1D15011	EPA 8260B	04/15/11 23:39	GMB	
Dibromofluoromethane	60	1	50.0	120 %	73-134		1D12021	EPA 8260B	04/14/11 09:25	GMB	
Dibromofluoromethane	54	1	50.0	108 %	73-134		1D15011	EPA 8260B	04/15/11 23:39	GMB	
Toluene-d8	60	1	50.0	120 %	66-138		1D12021	EPA 8260B	04/14/11 09:25	GMB	
Toluene-d8	54	1	50.0	108 %	66-138		1D15011	EPA 8260B	04/15/11 23:39	GMB	

**Description:** MW-8

**Lab Sample ID:** B101800-07

**Received:** 04/13/11 08:45

**Matrix:** Ground Water

**Sampled:** 04/12/11 14:50

**Work Order:** B101800

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Non-Halogenated Volatile Organics by GC**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>POL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Ethylene Glycol [107-21-1] ^	4.1	U	mg/L	1	4.1	10	1D15008	EPA 8015C	04/15/11 13:47	LAC	
Propylene Glycol [57-55-6] ^	1.8	U	mg/L	1	1.8	10	1D15008	EPA 8015C	04/15/11 13:47	LAC	
<b>Surrogates</b>	<b>Results</b>	<b>DF</b>	<b>Spike Lvl</b>	<b>% Rec</b>	<b>% Rec Limits</b>		<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
1,3-Butylene Glycol	130	1	99.7	126 %	50-150		1D15008	EPA 8015C	04/15/11 13:47	LAC	

**Description:** MW-8

**Lab Sample ID:** B101800-07

**Received:** 04/13/11 08:45

**Matrix:** Ground Water

**Sampled:** 04/12/11 14:50

**Work Order:** B101800

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Diesel Range Organics by GC**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
DRO (C10-C28) [ECL-0057] ^	0.039	IV	mg/L	1	0.024	0.10	1D13022	EPA 8015C	04/15/11 01:25	JSW	J-01
<i>Surrogates</i>											
<i>o-Terphenyl</i>	0.050	1	0.0500	100 %	63-139		1D13022	EPA 8015C	04/15/11 01:25	JSW	Notes

**Description:** MW-8**Lab Sample ID:** B101800-07**Received:** 04/13/11 08:45**Matrix:** Ground Water**Sampled:** 04/12/11 14:50**Work Order:** B101800**Project:** Cooper Tools**Sampled By:** Danny Hefner**Metals by EPA 6000/7000 Series Methods**

^ - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Mercury [7439-97-6] ^	0.0720	U	ug/L	1	0.0720	0.200	1D18013	EPA 7470A	04/20/11 10:11	LTS	

**Description:** MW-8

**Lab Sample ID:** B101800-07

**Received:** 04/13/11 08:45

**Matrix:** Ground Water

**Sampled:** 04/12/11 14:50

**Work Order:** B101800

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Metals (total recoverable) by EPA 6000/7000 Series Methods**
*^ - ENCO Jacksonville certified analyte [INC 442]*

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Arsenic [7440-38-2] ^	6.70	U	ug/L	1	6.70	10.0	1D15004	EPA 6010C	04/18/11 14:06	ACV	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1D15004	EPA 6010C	04/18/11 14:06	ACV	
Cadmium [7440-43-9] ^	0.370	U	ug/L	1	0.370	1.00	1D15004	EPA 6010C	04/18/11 14:06	ACV	
Chromium [7440-47-3] ^	1.30	U	ug/L	1	1.30	10.0	1D15004	EPA 6010C	04/18/11 14:06	ACV	
Copper [7440-50-8] ^	1.50	U	ug/L	1	1.50	10.0	1D15004	EPA 6010C	04/18/11 14:06	ACV	
Lead [7439-92-1] ^	2.90	U	ug/L	1	2.90	10.0	1D15004	EPA 6010C	04/18/11 14:06	ACV	
Nickel [7440-02-0] ^	1.10	U	ug/L	1	1.10	10.0	1D15004	EPA 6010C	04/18/11 14:06	ACV	
Selenium [7782-49-2] ^	8.90	U	ug/L	1	8.90	10.0	1D15004	EPA 6010C	04/18/11 14:06	ACV	
Silver [7440-22-4] ^	1.50	U	ug/L	1	1.50	10.0	1D15004	EPA 6010C	04/18/11 14:06	ACV	
Zinc [7440-66-6] ^	3.50	U	ug/L	1	3.50	10.0	1D15004	EPA 6010C	04/18/11 14:06	ACV	

**Description:** MW-8

**Lab Sample ID:** B101800-07

**Received:** 04/13/11 08:45

**Matrix:** Ground Water

**Sampled:** 04/12/11 14:50

**Work Order:** B101800

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Classical Chemistry Parameters**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Hexavalent Chromium [1854-02-99] ^	0.004	U	mg/L	1	0.004	0.030	1D13002	SM18 3500 Cr-D	04/13/11 11:45	PJG	QV-01
Oil & Grease (HEM) [C-0007] ^	4.41	I	mg/L	1	3.00	5.00	1D14007	EPA 1664A	04/18/11 10:43	MJF	

**Description:** MW-8

**Matrix:** Ground Water

**Project:** Cooper Tools

**Lab Sample ID:** B101800-07

**Received:** 04/13/11 08:45

**Sampled:** 04/12/11 14:50

**Work Order:** B101800

**Sampled By:** Danny Hefner

**Gasoline Range Organics by GC**
<sup>^</sup> - ENCO Cary certified analyte [NC 591]

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>POL</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
GRO (C6-C10) [ECL-0069] ^	2.01		mg/L	2	0.022	0.110	1D18016	EPA 8015C	04/19/11 13:24	bpk	
<b>Surrogates</b>											
2,5-Dibromotoluene	0.0746	1	0.100	75 %	70-130		1D18016	EPA 8015C	04/19/11 13:24	bpk	Notes

**Description:** MW-8

**Lab Sample ID:** B101800-07

**Received:** 04/13/11 08:45

**Matrix:** Ground Water

**Sampled:** 04/12/11 14:50

**Work Order:** B101800

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Metals (total recoverable) by EPA 6000/7000 Series Methods**
<sup>^</sup> - ENCO Cary certified analyte [NC 591]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Antimony [7440-36-0] ^	0.220	U	ug/L	1	0.220	2.00	1D14028	EPA 6020A	04/18/11 11:13	VLO	
Thallium [7440-28-0] ^	0.185	I	ug/L	1	0.110	1.00	1D14028	EPA 6020A	04/18/11 11:13	VLO	

**Description:** Rinse

**Lab Sample ID:** B101800-08

**Received:** 04/13/11 08:45

**Matrix:** Ground Water

**Sampled:** 04/12/11 10:00

**Work Order:** B101800

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Volatile Organic Compounds by GCMS**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>POL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.20	U	ug/L	1	0.20	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
1,1,1-Trichloroethane [71-55-6] ^	0.20	U	ug/L	1	0.20	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.32	U	ug/L	1	0.32	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
1,1,2-Trichloroethane [79-00-5] ^	0.40	U	ug/L	1	0.40	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
1,1-Dichloroethane [75-34-3] ^	0.30	U	ug/L	1	0.30	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
1,1-Dichloropropene [563-58-6] ^	0.21	U	ug/L	1	0.21	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
1,2,3-Trichlorobenzene [87-61-6] ^	0.50	U	ug/L	1	0.50	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
1,2,3-Trichloropropane [96-18-4] ^	0.30	U	ug/L	1	0.30	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
1,2,4-Trichlorobenzene [120-82-1] ^	0.41	U	ug/L	1	0.41	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
1,2,4-Trimethylbenzene [95-63-6] ^	0.28	U	ug/L	1	0.28	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.60	U	ug/L	1	0.60	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
1,2-Dibromoethane [106-93-4] ^	0.27	U	ug/L	1	0.27	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
1,2-Dichlorobenzene [95-50-1] ^	0.24	U	ug/L	1	0.24	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
1,2-Dichloroethane [107-06-2] ^	0.28	U	ug/L	1	0.28	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
1,2-Dichloropropane [78-87-5] ^	0.30	U	ug/L	1	0.30	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
1,3,5-Trimethylbenzene [108-67-8] ^	0.26	U	ug/L	1	0.26	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
1,3-Dichlorobenzene [541-73-1] ^	0.27	U	ug/L	1	0.27	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
1,3-Dichloropropane [142-28-9] ^	0.25	U	ug/L	1	0.25	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
1,4-Dichlorobenzene [106-46-7] ^	0.23	U	ug/L	1	0.23	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
2,2-Dichloropropane [594-20-7] ^	0.40	U	ug/L	1	0.40	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
2-Butanone [78-93-3] ^	0.38	U	ug/L	1	0.38	5.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
2-Chloroethyl Vinyl Ether [110-75-8] ^	1.5	U	ug/L	1	1.5	5.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
2-Chlorotoluene [95-49-8] ^	0.33	U	ug/L	1	0.33	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
2-Hexanone [591-78-6] ^	0.50	U	ug/L	1	0.50	5.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
4-Chlorotoluene [106-43-4] ^	0.22	U	ug/L	1	0.22	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
4-Isopropyltoluene [99-87-6] ^	0.29	U	ug/L	1	0.29	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
4-Methyl-2-pentanone [108-10-1] ^	1.0	U	ug/L	1	1.0	5.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
Acetone [67-64-1] ^	1.1	U	ug/L	1	1.1	5.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
Benzene [71-43-2] ^	0.27	U	ug/L	1	0.27	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
Bromobenzene [108-86-1] ^	0.26	U	ug/L	1	0.26	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
Bromochloromethane [74-97-5] ^	0.28	U	ug/L	1	0.28	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
Bromodichloromethane [75-27-4] ^	0.20	U	ug/L	1	0.20	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
Bromoform [75-25-2] ^	0.33	U	ug/L	1	0.33	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
Bromomethane [74-83-9] ^	0.64	U	ug/L	1	0.64	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
<b>Carbon disulfide [75-15-0] ^</b>	<b>0.41</b>	<b>IV</b>	<b>ug/L</b>	<b>1</b>	<b>0.24</b>	<b>5.0</b>	<b>1D15011</b>	<b>EPA 8260B</b>	<b>04/15/11 20:18</b>	<b>GMB</b>	J-01
Carbon tetrachloride [56-23-5] ^	0.20	U	ug/L	1	0.20	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
Chlorobenzene [108-90-7] ^	0.24	U	ug/L	1	0.24	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
Chloroethane [75-00-3] ^	0.31	U	ug/L	1	0.31	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
Chloroform [67-66-3] ^	0.21	U	ug/L	1	0.21	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
Chloromethane [74-87-3] ^	0.31	U	ug/L	1	0.31	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
cis-1,2-Dichloroethene [156-59-2] ^	0.22	U	ug/L	1	0.22	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
cis-1,3-Dichloropropene [10061-01-5] ^	0.35	U	ug/L	1	0.35	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
Dibromochloromethane [124-48-1] ^	0.27	U	ug/L	1	0.27	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
Dichlorodifluoromethane [75-71-8] ^	0.29	U	ug/L	1	0.29	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
Ethylbenzene [100-41-4] ^	0.26	U	ug/L	1	0.26	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
Hexachlorobutadiene [87-68-3] ^	0.35	U	ug/L	1	0.35	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
Isopropylbenzene [98-82-8] ^	0.20	U	ug/L	1	0.20	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
m,p-Xylenes [108-38-3/106-42-3] ^	0.50	U	ug/L	1	0.50	2.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
Methylene chloride [75-09-2] ^	0.62	U	ug/L	1	0.62	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	

**Description:** Rinse

**Lab Sample ID:** B101800-08

**Received:** 04/13/11 08:45

**Matrix:** Ground Water

**Sampled:** 04/12/11 10:00

**Work Order:** B101800

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

### Volatile Organic Compounds by GCMS

<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	POL	Batch	Method	Analyzed	By	Notes
Methyl-tert-Butyl Ether [1634-04-4] ^	0.24	U	ug/L	1	0.24	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
Naphthalene [91-20-3] ^	0.30	U	ug/L	1	0.30	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
n-Butyl Benzene [104-51-8] ^	0.28	U	ug/L	1	0.28	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
n-Propyl Benzene [103-65-1] ^	0.20	U	ug/L	1	0.20	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
o-Xylene [95-47-6] ^	0.25	U	ug/L	1	0.25	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
sec-Butylbenzene [135-98-8] ^	0.20	U	ug/L	1	0.20	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
Styrene [100-42-5] ^	0.32	U	ug/L	1	0.32	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
tert-Butylbenzene [98-06-6] ^	0.21	U	ug/L	1	0.21	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
Tetrachloroethene [127-18-4] ^	0.21	U	ug/L	1	0.21	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
Toluene [108-88-3] ^	0.30	U	ug/L	1	0.30	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
trans-1,2-Dichloroethene [156-60-5] ^	0.30	U	ug/L	1	0.30	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
trans-1,3-Dichloropropene [10061-02-6] ^	0.33	U	ug/L	1	0.33	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
Trichloroethene [79-01-6] ^	0.24	U	ug/L	1	0.24	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
Trichlorofluoromethane [75-69-4] ^	0.20	U	ug/L	1	0.20	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
Vinyl chloride [75-01-4] ^	0.33	U	ug/L	1	0.33	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
Xylenes (Total) [1330-20-7] ^	0.50	U	ug/L	1	0.50	1.0	1D15011	EPA 8260B	04/15/11 20:18	GMB	
<b>Surrogates</b>											
4-Bromofluorobenzene	43	I	50.0	87 %	62-132		1D15011	EPA 8260B	04/15/11 20:18	GMB	
Dibromofluoromethane	52	I	50.0	104 %	73-134		1D15011	EPA 8260B	04/15/11 20:18	GMB	
Toluene-d8	52	I	50.0	104 %	66-138		1D15011	EPA 8260B	04/15/11 20:18	GMB	

**Description:** Rinse

**Lab Sample ID:** B101800-08

**Received:** 04/13/11 08:45

**Matrix:** Ground Water

**Sampled:** 04/12/11 10:00

**Work Order:** B101800

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Non-Halogenated Volatile Organics by GC**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>POL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Ethylene Glycol [107-21-1] ^	4.1	U	mg/L	1	4.1	10	1D15008	EPA 8015C	04/15/11 13:58	LAC	
Propylene Glycol [57-55-6] ^	1.8	U	mg/L	1	1.8	10	1D15008	EPA 8015C	04/15/11 13:58	LAC	

**Surrogates**

	<b>Results</b>	<b>DF</b>	<b>Spike Lvl</b>	<b>% Rec</b>	<b>% Rec Limits</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
1,3-Butylene Glycol	120	1	99.7	121 %	50-150	1D15008	EPA 8015C	04/15/11 13:58	LAC	

**Description:** Rinse  
**Matrix:** Ground Water  
**Project:** Cooper Tools

**Lab Sample ID:** B101800-08  
**Sampled:** 04/12/11 10:00  
**Sampled By:** Danny Hefner

**Received:** 04/13/11 08:45  
**Work Order:** B101800

### Diesel Range Organics by GC

<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQI</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
DRO (C10-C28) [ECL-0057] ^	0.054	IV	mg/L	1	0.024	0.10	1D13022	EPA 8015C	04/15/11 01:49	JSW	J-01
<b>Surrogates</b>											
<i>o-Terphenyl</i>	Results	DF	Spike Lvl	% Rec	% Rec Limits		Batch	Method	Analyzed	By	Notes
	0.052	1	0.0500	104 %	63-139		1D13022	EPA 8015C	04/15/11 01:49	JSW	



**Description:** Rinse  
**Matrix:** Ground Water  
**Project:** Cooper Tools

**Lab Sample ID:** B101800-08  
**Sampled:** 04/12/11 10:00  
**Sampled By:** Danny Hefner

**Received:** 04/13/11 08:45  
**Work Order:** B101800

### Metals by EPA 6000/7000 Series Methods

*^ - ENCO Jacksonville certified analyte [NC 442]*

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>POL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Mercury [7439-97-6] ^	0.0720	U	ug/L	1	0.0720	0.200	1D18013	EPA 7470A	04/20/11 10:12	LTS	

**Description:** Rinse

**Lab Sample ID:** B101800-08

**Received:** 04/13/11 08:45

**Matrix:** Ground Water

**Sampled:** 04/12/11 10:00

**Work Order:** B101800

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Metals (total recoverable) by EPA 6000/7000 Series Methods**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Arsenic [7440-38-2] ^	6.70	U	ug/L	1	6.70	10.0	1D15004	EPA 6010C	04/18/11 14:08	ACV	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1D15004	EPA 6010C	04/18/11 14:08	ACV	
Cadmium [7440-43-9] ^	0.370	U	ug/L	1	0.370	1.00	1D15004	EPA 6010C	04/18/11 14:08	ACV	
Chromium [7440-47-3] ^	1.30	U	ug/L	1	1.30	10.0	1D15004	EPA 6010C	04/18/11 14:08	ACV	
Copper [7440-50-8] ^	1.50	U	ug/L	1	1.50	10.0	1D15004	EPA 6010C	04/18/11 14:08	ACV	
Lead [7439-92-1] ^	2.90	U	ug/L	1	2.90	10.0	1D15004	EPA 6010C	04/18/11 14:08	ACV	
Nickel [7440-02-0] ^	1.10	U	ug/L	1	1.10	10.0	1D15004	EPA 6010C	04/18/11 14:08	ACV	
Selenium [7782-49-2] ^	8.90	U	ug/L	1	8.90	10.0	1D15004	EPA 6010C	04/18/11 14:08	ACV	
Silver [7440-22-4] ^	1.50	U	ug/L	1	1.50	10.0	1D15004	EPA 6010C	04/18/11 14:08	ACV	
Zinc [7440-66-6] ^	41.2	V	ug/L	1	3.50	10.0	1D15004	EPA 6010C	04/18/11 14:08	ACV	J-01

**Description:** Rinse  
**Matrix:** Ground Water  
**Project:** Cooper Tools

**Lab Sample ID:** B101800-08  
**Sampled:** 04/12/11 10:00  
**Sampled By:** Danny Hefner

**Received:** 04/13/11 08:45  
**Work Order:** B101800

### Classical Chemistry Parameters

<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>POL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Hexavalent Chromium [1854-02-99] ^	0.004	U	mg/L	1	0.004	0.030	1D13002	SM18 3500 Cr-D	04/13/11 09:15	PJG	QV-01
Oil & Grease (HEM) [C-0007] ^	3.00	U	mg/L	1	3.00	5.00	1D14007	EPA 1664A	04/18/11 10:43	MJF	

**Description:** Rinse

**Lab Sample ID:** B101800-08

**Received:** 04/13/11 08:45

**Matrix:** Ground Water

**Sampled:** 04/12/11 10:00

**Work Order:** B101800

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Gasoline Range Organics by GC**
<sup>^</sup> - ENCO Cary certified analyte [NC 591]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>POL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
GRO (C6-C10) [ECL-0069] ^	0.011	U	mg/L	1	0.011	0.055	1D18016	EPA 8015C	04/19/11 12:52	bpk	
<b>Surrogates</b>											
2,5-Dibromotoluene	0.0822	1	0.100	82 %	70-130		1D18016	EPA 8015C	04/19/11 12:52	bpk	Notes

**Description:** Rinse  
**Matrix:** Ground Water  
**Project:** Cooper Tools

**Lab Sample ID:** B101800-08  
**Sampled:** 04/12/11 10:00  
**Sampled By:** Danny Hefner

**Received:** 04/13/11 08:45  
**Work Order:** B101800

### Metals (total recoverable) by EPA 6000/7000 Series Methods

*^ - ENCO Cary certified analyte [NC 591]*

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Antimony [7440-36-0] ^	0.220	U	ug/L	1	0.220	2.00	1D14028	EPA 6020A	04/18/11 11:16	VLO	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	1D14028	EPA 6020A	04/18/11 11:16	VLO	

**Description:** Field

**Lab Sample ID:** B101800-09

**Received:** 04/13/11 08:45

**Matrix:** Ground Water

**Sampled:** 04/12/11 15:40

**Work Order:** B101800

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

### Volatile Organic Compounds by GCMS

<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	POL	Batch	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.20	U	ug/L	1	0.20	1.0	ID15011	EPA 8260B	04/15/11 16:07	GMB	
1,1,1-Trichloroethane [71-55-6] ^	0.20	U	ug/L	1	0.20	1.0	ID15011	EPA 8260B	04/15/11 16:07	GMB	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.32	U	ug/L	1	0.32	1.0	ID15011	EPA 8260B	04/15/11 16:07	GMB	
1,1,2-Trichloroethane [79-00-5] ^	0.40	U	ug/L	1	0.40	1.0	ID15011	EPA 8260B	04/15/11 16:07	GMB	
1,1-Dichloroethane [75-34-3] ^	0.30	U	ug/L	1	0.30	1.0	ID15011	EPA 8260B	04/15/11 16:07	GMB	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	ID15011	EPA 8260B	04/15/11 16:07	GMB	
1,1-Dichloropropene [563-58-6] ^	0.21	U	ug/L	1	0.21	1.0	ID15011	EPA 8260B	04/15/11 16:07	GMB	
1,2,3-Trichlorobenzene [87-61-6] ^	0.50	U	ug/L	1	0.50	1.0	ID15011	EPA 8260B	04/15/11 16:07	GMB	
1,2,3-Trichloropropane [96-18-4] ^	0.30	U	ug/L	1	0.30	1.0	ID15011	EPA 8260B	04/15/11 16:07	GMB	
1,2,4-Trichlorobenzene [120-82-1] ^	0.41	U	ug/L	1	0.41	1.0	ID15011	EPA 8260B	04/15/11 16:07	GMB	
1,2,4-Trimethylbenzene [95-63-6] ^	0.28	U	ug/L	1	0.28	1.0	ID15011	EPA 8260B	04/15/11 16:07	GMB	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.60	U	ug/L	1	0.60	1.0	ID15011	EPA 8260B	04/15/11 16:07	GMB	
1,2-Dibromoethane [106-93-4] ^	0.27	U	ug/L	1	0.27	1.0	ID15011	EPA 8260B	04/15/11 16:07	GMB	
1,2-Dichlorobenzene [95-50-1] ^	0.24	U	ug/L	1	0.24	1.0	ID15011	EPA 8260B	04/15/11 16:07	GMB	
1,2-Dichloroethane [107-06-2] ^	0.28	U	ug/L	1	0.28	1.0	ID15011	EPA 8260B	04/15/11 16:07	GMB	
1,2-Dichloropropane [78-87-5] ^	0.30	U	ug/L	1	0.30	1.0	ID15011	EPA 8260B	04/15/11 16:07	GMB	
1,3,5-Trimethylbenzene [108-67-8] ^	0.26	U	ug/L	1	0.26	1.0	ID15011	EPA 8260B	04/15/11 16:07	GMB	
1,3-Dichlorobenzene [541-73-1] ^	0.27	U	ug/L	1	0.27	1.0	ID15011	EPA 8260B	04/15/11 16:07	GMB	
1,3-Dichloropropane [142-28-9] ^	0.25	U	ug/L	1	0.25	1.0	ID15011	EPA 8260B	04/15/11 16:07	GMB	
1,4-Dichlorobenzene [106-46-7] ^	0.23	U	ug/L	1	0.23	1.0	ID15011	EPA 8260B	04/15/11 16:07	GMB	
2,2-Dichloropropane [594-20-7] ^	0.40	U	ug/L	1	0.40	1.0	ID15011	EPA 8260B	04/15/11 16:07	GMB	
2-Butanone [78-93-3] ^	0.38	U	ug/L	1	0.38	5.0	ID15011	EPA 8260B	04/15/11 16:07	GMB	
2-Chloroethyl Vinyl Ether [110-75-8] ^	1.5	U	ug/L	1	1.5	5.0	ID15011	EPA 8260B	04/15/11 16:07	GMB	
2-Chlorotoluene [95-49-8] ^	0.33	U	ug/L	1	0.33	1.0	ID15011	EPA 8260B	04/15/11 16:07	GMB	
2-Hexanone [591-78-6] ^	0.50	U	ug/L	1	0.50	5.0	ID15011	EPA 8260B	04/15/11 16:07	GMB	
4-Chlorotoluene [106-43-4] ^	0.22	U	ug/L	1	0.22	1.0	ID15011	EPA 8260B	04/15/11 16:07	GMB	
4-Isopropyltoluene [99-87-6] ^	0.29	U	ug/L	1	0.29	1.0	ID15011	EPA 8260B	04/15/11 16:07	GMB	
4-Methyl-2-pentanone [108-10-1] ^	1.0	U	ug/L	1	1.0	5.0	ID15011	EPA 8260B	04/15/11 16:07	GMB	
Acetone [67-64-1] ^	1.1	U	ug/L	1	1.1	5.0	ID15011	EPA 8260B	04/15/11 16:07	GMB	
Benzene [71-43-2] ^	0.27	U	ug/L	1	0.27	1.0	ID15011	EPA 8260B	04/15/11 16:07	GMB	
Bromobenzene [108-86-1] ^	0.26	U	ug/L	1	0.26	1.0	ID15011	EPA 8260B	04/15/11 16:07	GMB	
Bromochloromethane [74-97-5] ^	0.28	U	ug/L	1	0.28	1.0	ID15011	EPA 8260B	04/15/11 16:07	GMB	
Bromodichloromethane [75-27-4] ^	0.20	U	ug/L	1	0.20	1.0	ID15011	EPA 8260B	04/15/11 16:07	GMB	
Bromoform [75-25-2] ^	0.33	U	ug/L	1	0.33	1.0	ID15011	EPA 8260B	04/15/11 16:07	GMB	
Bromomethane [74-83-9] ^	0.64	U	ug/L	1	0.64	1.0	ID15011	EPA 8260B	04/15/11 16:07	GMB	
<b>Carbon disulfide [75-15-0] ^</b>	<b>0.48</b>	<b>IV</b>	<b>ug/L</b>	<b>1</b>	<b>0.24</b>	<b>5.0</b>	<b>ID15011</b>	<b>EPA 8260B</b>	<b>04/15/11 16:07</b>	<b>GMB</b>	J-01
Carbon tetrachloride [56-23-5] ^	0.20	U	ug/L	1	0.20	1.0	ID15011	EPA 8260B	04/15/11 16:07	GMB	
Chlorobenzene [108-90-7] ^	0.24	U	ug/L	1	0.24	1.0	ID15011	EPA 8260B	04/15/11 16:07	GMB	
Chloroethane [75-00-3] ^	0.31	U	ug/L	1	0.31	1.0	ID15011	EPA 8260B	04/15/11 16:07	GMB	
Chloroform [67-66-3] ^	0.21	U	ug/L	1	0.21	1.0	ID15011	EPA 8260B	04/15/11 16:07	GMB	
Chloromethane [74-87-3] ^	0.31	U	ug/L	1	0.31	1.0	ID15011	EPA 8260B	04/15/11 16:07	GMB	
cis-1,2-Dichloroethene [156-59-2] ^	0.22	U	ug/L	1	0.22	1.0	ID15011	EPA 8260B	04/15/11 16:07	GMB	
cis-1,3-Dichloropropene [10061-01-5] ^	0.35	U	ug/L	1	0.35	1.0	ID15011	EPA 8260B	04/15/11 16:07	GMB	
Dibromochloromethane [124-48-1] ^	0.27	U	ug/L	1	0.27	1.0	ID15011	EPA 8260B	04/15/11 16:07	GMB	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	ID15011	EPA 8260B	04/15/11 16:07	GMB	
Dichlorodifluoromethane [75-71-8] ^	0.29	U	ug/L	1	0.29	1.0	ID15011	EPA 8260B	04/15/11 16:07	GMB	
Ethylbenzene [100-41-4] ^	0.26	U	ug/L	1	0.26	1.0	ID15011	EPA 8260B	04/15/11 16:07	GMB	
Hexachlorobutadiene [87-68-3] ^	0.35	U	ug/L	1	0.35	1.0	ID15011	EPA 8260B	04/15/11 16:07	GMB	
Isopropylbenzene [98-82-8] ^	0.20	U	ug/L	1	0.20	1.0	ID15011	EPA 8260B	04/15/11 16:07	GMB	
m,p-Xylenes [108-38-3/106-42-3] ^	0.50	U	ug/L	1	0.50	2.0	ID15011	EPA 8260B	04/15/11 16:07	GMB	
Methylene chloride [75-09-2] ^	0.62	U	ug/L	1	0.62	1.0	ID15011	EPA 8260B	04/15/11 16:07	GMB	

**Description:** Field

**Lab Sample ID:** B101800-09

**Received:** 04/13/11 08:45

**Matrix:** Ground Water

**Sampled:** 04/12/11 15:40

**Work Order:** B101800

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Volatile Organic Compounds by GCMS**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>POL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Methyl-tert-Butyl Ether [1634-04-4] ^	0.24	U	ug/L	1	0.24	1.0	1D15011	EPA 8260B	04/15/11 16:07	GMB	
Naphthalene [91-20-3] ^	0.30	U	ug/L	1	0.30	1.0	1D15011	EPA 8260B	04/15/11 16:07	GMB	
n-Butyl Benzene [104-51-8] ^	0.28	U	ug/L	1	0.28	1.0	1D15011	EPA 8260B	04/15/11 16:07	GMB	
n-Propyl Benzene [103-65-1] ^	0.20	U	ug/L	1	0.20	1.0	1D15011	EPA 8260B	04/15/11 16:07	GMB	
o-Xylene [95-47-6] ^	0.25	U	ug/L	1	0.25	1.0	1D15011	EPA 8260B	04/15/11 16:07	GMB	
sec-Butylbenzene [135-98-8] ^	0.20	U	ug/L	1	0.20	1.0	1D15011	EPA 8260B	04/15/11 16:07	GMB	
Styrene [100-42-5] ^	0.32	U	ug/L	1	0.32	1.0	1D15011	EPA 8260B	04/15/11 16:07	GMB	
tert-Butylbenzene [98-06-6] ^	0.21	U	ug/L	1	0.21	1.0	1D15011	EPA 8260B	04/15/11 16:07	GMB	
Tetrachloroethene [127-18-4] ^	0.21	U	ug/L	1	0.21	1.0	1D15011	EPA 8260B	04/15/11 16:07	GMB	
Toluene [108-88-3] ^	0.30	U	ug/L	1	0.30	1.0	1D15011	EPA 8260B	04/15/11 16:07	GMB	
trans-1,2-Dichloroethene [156-60-5] ^	0.30	U	ug/L	1	0.30	1.0	1D15011	EPA 8260B	04/15/11 16:07	GMB	
trans-1,3-Dichloropropene [10061-02-6] ^	0.33	U	ug/L	1	0.33	1.0	1D15011	EPA 8260B	04/15/11 16:07	GMB	
Trichloroethene [79-01-6] ^	0.24	U	ug/L	1	0.24	1.0	1D15011	EPA 8260B	04/15/11 16:07	GMB	
Trichlorofluoromethane [75-69-4] ^	0.20	U	ug/L	1	0.20	1.0	1D15011	EPA 8260B	04/15/11 16:07	GMB	
Vinyl chloride [75-01-4] ^	0.33	U	ug/L	1	0.33	1.0	1D15011	EPA 8260B	04/15/11 16:07	GMB	
Xylenes (Total) [1330-20-7] ^	0.50	U	ug/L	1	0.50	1.0	1D15011	EPA 8260B	04/15/11 16:07	GMB	
<b>Surrogates</b>											
4-Bromofluorobenzene	45	1	50.0	89 %	62-132		1D15011	EPA 8260B	04/15/11 16:07	GMB	
Dibromofluoromethane	54	1	50.0	107 %	73-134		1D15011	EPA 8260B	04/15/11 16:07	GMB	
Toluene-d8	57	1	50.0	115 %	66-138		1D15011	EPA 8260B	04/15/11 16:07	GMB	

**Description:** Field

**Lab Sample ID:** B101800-09

**Received:** 04/13/11 08:45

**Matrix:** Ground Water

**Sampled:** 04/12/11 15:40

**Work Order:** B101800

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Non-Halogenated Volatile Organics by GC**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Ethylene Glycol [107-21-1] ^	4.1	U	mg/L	1	4.1	10	1D15008	EPA 8015C	04/15/11 14:09	LAC	
Propylene Glycol [57-55-6] ^	1.8	U	mg/L	1	1.8	10	1D15008	EPA 8015C	04/15/11 14:09	LAC	
<b>Surrogates</b>	<b>Results</b>	<b>DF</b>	<b>Spike Lvl</b>	<b>% Rec</b>	<b>% Rec Limits</b>		<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
1,3-Butylene Glycol	110	1	99.7	111 %	50-150		1D15008	EPA 8015C	04/15/11 14:09	LAC	

**Description:** Field

**Lab Sample ID:** B101800-09

**Received:** 04/13/11 08:45

**Matrix:** Ground Water

**Sampled:** 04/12/11 15:40

**Work Order:** B101800

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Diesel Range Organics by GC**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>POL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
DRO (C10-C28) [ECL-0057] ^	0.054	IV	mg/L	1	0.024	0.10	1D13022	EPA 8015C	04/15/11 02:13	JSW	J-01
<b>Surrogates</b>	<b>Results</b>	<b>DF</b>	<b>Spike Lvl</b>	<b>% Rec</b>	<b>% Rec Limits</b>		<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
<i>o-Terphenyl</i>	0.054	1	0.0500	107 %	63-139		1D13022	EPA 8015C	04/15/11 02:13	JSW	

**Description:** Field**Lab Sample ID:** B101800-09**Received:** 04/13/11 08:45**Matrix:** Ground Water**Sampled:** 04/12/11 15:40**Work Order:** B101800**Project:** Cooper Tools**Sampled By:** Danny Hefner**Metals by EPA 6000/7000 Series Methods**

^ - ENCO Jacksonville certified analyte [NC 442]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Mercury [7439-97-6] ^	0.0720	U	ug/L	1	0.0720	0.200	1D18013	EPA 7470A	04/20/11 10:14	LTS	

**Description:** Field

**Lab Sample ID:** B101800-09

**Received:** 04/13/11 08:45

**Matrix:** Ground Water

**Sampled:** 04/12/11 15:40

**Work Order:** B101800

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Metals (total recoverable) by EPA 6000/7000 Series Methods**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>POL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Arsenic [7440-38-2] ^	6.70	U	ug/L	1	6.70	10.0	1D15004	EPA 6010C	04/18/11 14:11	ACV	
Beryllium [7440-41-7] ^	0.100	U	ug/L	1	0.100	1.00	1D15004	EPA 6010C	04/18/11 14:11	ACV	
Cadmium [7440-43-9] ^	0.370	U	ug/L	1	0.370	1.00	1D15004	EPA 6010C	04/18/11 14:11	ACV	
Chromium [7440-47-3] ^	1.30	U	ug/L	1	1.30	10.0	1D15004	EPA 6010C	04/18/11 14:11	ACV	
Copper [7440-50-8] ^	1.50	U	ug/L	1	1.50	10.0	1D15004	EPA 6010C	04/18/11 14:11	ACV	
Lead [7439-92-1] ^	2.90	U	ug/L	1	2.90	10.0	1D15004	EPA 6010C	04/18/11 14:11	ACV	
Nickel [7440-02-0] ^	1.10	U	ug/L	1	1.10	10.0	1D15004	EPA 6010C	04/18/11 14:11	ACV	
Selenium [7782-49-2] ^	8.90	U	ug/L	1	8.90	10.0	1D15004	EPA 6010C	04/18/11 14:11	ACV	
Silver [7440-22-4] ^	1.50	U	ug/L	1	1.50	10.0	1D15004	EPA 6010C	04/18/11 14:11	ACV	
Zinc [7440-66-6] ^	<b>15.2</b>	V	ug/L	1	3.50	10.0	1D15004	EPA 6010C	04/18/11 14:11	ACV	J-01

**Description:** Field  
**Matrix:** Ground Water  
**Project:** Cooper Tools

**Lab Sample ID:** B101800-09  
**Sampled:** 04/12/11 15:40  
**Sampled By:** Danny Hefner

**Received:** 04/13/11 08:45  
**Work Order:** B101800

### Classical Chemistry Parameters

*^ - ENCO Jacksonville certified analyte [NC 442]*

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Hexavalent Chromium [1854-02-99] ^	0.004	U	mg/L	1	0.004	0.030	1D13002	SM18 3500 Cr-D	04/13/11 11:45	PJG	QV-01
Oil & Grease (HEM) [C-0007] ^	4.82	I	mg/L	1	3.00	5.00	1D14007	EPA 1664A	04/18/11 10:43	MJF	

**Description:** Field

**Lab Sample ID:** B101800-09

**Received:** 04/13/11 08:45

**Matrix:** Ground Water

**Sampled:** 04/12/11 15:40

**Work Order:** B101800

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Gasoline Range Organics by GC**
<sup>^</sup> - ENCO Cary certified analyte [NC 591]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
GRO (C6-C10) [ECL-0069] ^	0.011	U	mg/L	1	0.011	0.055	1D18016	EPA 8015C	04/18/11 18:15	bpk	
<b>Surrogates</b>	<b>Results</b>	<b>DF</b>	<b>Spike Lvl</b>	<b>% Rec</b>	<b>% Rec Limits</b>		<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
2,5-Dibromotoluene	0.0750	1	0.100	75 %	70-130		1D18016	EPA 8015C	04/18/11 18:15	bpk	

**Description:** Field

**Lab Sample ID:** B101800-09

**Received:** 04/13/11 08:45

**Matrix:** Ground Water

**Sampled:** 04/12/11 15:40

**Work Order:** B101800

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Metals (total recoverable) by EPA 6000/7000 Series Methods**
<sup>^</sup> - ENCO Cary certified analyte [NC 591]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Antimony [7440-36-0] ^	0.220	U	ug/L	1	0.220	2.00	1D14028	EPA 6020A	04/18/11 11:20	VLO	
Thallium [7440-28-0] ^	0.110	U	ug/L	1	0.110	1.00	1D14028	EPA 6020A	04/18/11 11:20	VLO	



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**Description:** Soil-1**Lab Sample ID:** B101800-10**Received:** 04/13/11 08:45**Matrix:** Soil**Sampled:** 04/12/11 11:25**Work Order:** B101800**Project:** Cooper Tools**Sampled By:** Danny Hefner**% Solids:** 79.01**Volatile Organic Compounds by GCMS**

^ - ENCO Jacksonville certified analyte [NC 442]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	POL	Batch	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.0006	U	mg/kg dry	1	0.0006	0.0010	1D14017	EPA 8260B	04/15/11 02:19	GMB	
1,1,1-Trichloroethane [71-55-6] ^	0.0003	U	mg/kg dry	1	0.0003	0.0010	1D14017	EPA 8260B	04/15/11 02:19	GMB	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.0003	U	mg/kg dry	1	0.0003	0.0010	1D14017	EPA 8260B	04/15/11 02:19	GMB	
1,1,2-Trichloroethane [79-00-5] ^	0.0004	U	mg/kg dry	1	0.0004	0.0010	1D14017	EPA 8260B	04/15/11 02:19	GMB	
<b>1,1-Dichloroethane [75-34-3] ^</b>	<b>0.073</b>		mg/kg dry	1	0.0004	0.0010	1D14017	EPA 8260B	04/15/11 02:19	GMB	
<b>1,1-Dichloroethene [75-35-4] ^</b>	<b>0.0006</b>	I	mg/kg dry	1	0.0005	0.0010	1D14017	EPA 8260B	04/15/11 02:19	GMB	
1,1-Dichloropropene [563-58-6] ^	0.0001	U	mg/kg dry	1	0.0001	0.0010	1D14017	EPA 8260B	04/15/11 02:19	GMB	
1,2,3-Trichlorobenzene [87-61-6] ^	0.0003	U	mg/kg dry	1	0.0003	0.0010	1D14017	EPA 8260B	04/15/11 02:19	GMB	
1,2,3-Trichloropropane [96-18-4] ^	0.0003	U	mg/kg dry	1	0.0003	0.0010	1D14017	EPA 8260B	04/15/11 02:19	GMB	
1,2,4-Trichlorobenzene [120-82-1] ^	0.0002	U	mg/kg dry	1	0.0002	0.0010	1D14017	EPA 8260B	04/15/11 02:19	GMB	
1,2,4-Trimethylbenzene [95-63-6] ^	0.0005	U	mg/kg dry	1	0.0005	0.0010	1D14017	EPA 8260B	04/15/11 02:19	GMB	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.0004	U	mg/kg dry	1	0.0004	0.0010	1D14017	EPA 8260B	04/15/11 02:19	GMB	
1,2-Dibromoethane [106-93-4] ^	0.0004	U	mg/kg dry	1	0.0004	0.0010	1D14017	EPA 8260B	04/15/11 02:19	GMB	
1,2-Dichlorobenzene [95-50-1] ^	0.0005	U	mg/kg dry	1	0.0005	0.0010	1D14017	EPA 8260B	04/15/11 02:19	GMB	
<b>1,2-Dichloroethane [107-06-2] ^</b>	<b>0.0009</b>	I	mg/kg dry	1	0.0004	0.0010	1D14017	EPA 8260B	04/15/11 02:19	GMB	
1,2-Dichloropropane [78-87-5] ^	0.0003	U	mg/kg dry	1	0.0003	0.0010	1D14017	EPA 8260B	04/15/11 02:19	GMB	
1,3,5-Trimethylbenzene [108-67-8] ^	0.0006	U	mg/kg dry	1	0.0006	0.0010	1D14017	EPA 8260B	04/15/11 02:19	GMB	
1,3-Dichlorobenzene [541-73-1] ^	0.0005	U	mg/kg dry	1	0.0005	0.0010	1D14017	EPA 8260B	04/15/11 02:19	GMB	
1,3-Dichloropropane [142-28-9] ^	0.0003	U	mg/kg dry	1	0.0003	0.0010	1D14017	EPA 8260B	04/15/11 02:19	GMB	
1,4-Dichlorobenzene [106-46-7] ^	0.0005	U	mg/kg dry	1	0.0005	0.0010	1D14017	EPA 8260B	04/15/11 02:19	GMB	
2,2-Dichloropropane [594-20-7] ^	0.0002	U	mg/kg dry	1	0.0002	0.0010	1D14017	EPA 8260B	04/15/11 02:19	GMB	
<b>2-Butanone [78-93-3] ^</b>	<b>0.043</b>		mg/kg dry	1	0.0027	0.0051	1D14017	EPA 8260B	04/15/11 02:19	GMB	
2-Chloroethyl Vinyl Ether [110-75-8] ^	0.0014	U	mg/kg dry	1	0.0014	0.0051	1D14017	EPA 8260B	04/15/11 02:19	GMB	
2-Chlorotoluene [95-49-8] ^	0.0005	U	mg/kg dry	1	0.0005	0.0010	1D14017	EPA 8260B	04/15/11 02:19	GMB	
2-Hexanone [591-78-6] ^	0.0008	U	mg/kg dry	1	0.0008	0.0051	1D14017	EPA 8260B	04/15/11 02:19	GMB	
4-Chlorotoluene [106-43-4] ^	0.0004	U	mg/kg dry	1	0.0004	0.0010	1D14017	EPA 8260B	04/15/11 02:19	GMB	
<b>4-Isopropyltoluene [99-87-6] ^</b>	<b>0.0020</b>		mg/kg dry	1	0.0005	0.0010	1D14017	EPA 8260B	04/15/11 02:19	GMB	
4-Methyl-2-pentanone [108-10-1] ^	0.0027	U	mg/kg dry	1	0.0027	0.0051	1D14017	EPA 8260B	04/15/11 02:19	GMB	
<b>Acetone [67-64-1] ^</b>	<b>0.30</b>	LV	mg/kg dry	1	0.0013	0.010	1D14017	EPA 8260B	04/15/11 02:19	GMB	QB-01
<b>Benzene [71-43-2] ^</b>	<b>0.0007</b>	I	mg/kg dry	1	0.0003	0.0010	1D14017	EPA 8260B	04/15/11 02:19	GMB	
Bromobenzene [108-86-1] ^	0.0004	U	mg/kg dry	1	0.0004	0.0010	1D14017	EPA 8260B	04/15/11 02:19	GMB	
Bromochloromethane [74-97-5] ^	0.0007	U	mg/kg dry	1	0.0007	0.0010	1D14017	EPA 8260B	04/15/11 02:19	GMB	
Bromodichloromethane [75-27-4] ^	0.0002	U	mg/kg dry	1	0.0002	0.0010	1D14017	EPA 8260B	04/15/11 02:19	GMB	
Bromoform [75-25-2] ^	0.0002	U	mg/kg dry	1	0.0002	0.0010	1D14017	EPA 8260B	04/15/11 02:19	GMB	
Bromomethane [74-83-9] ^	0.0004	U	mg/kg dry	1	0.0004	0.0010	1D14017	EPA 8260B	04/15/11 02:19	GMB	
<b>Carbon disulfide [75-15-0] ^</b>	<b>0.0027</b>	I	mg/kg dry	1	0.0011	0.0051	1D14017	EPA 8260B	04/15/11 02:19	GMB	
Carbon Tetrachloride [56-23-5] ^	0.0002	U	mg/kg dry	1	0.0002	0.0010	1D14017	EPA 8260B	04/15/11 02:19	GMB	
<b>Chlorobenzene [108-90-7] ^</b>	<b>0.0004</b>	I	mg/kg dry	1	0.0003	0.0010	1D14017	EPA 8260B	04/15/11 02:19	GMB	
<b>Chloroethane [75-00-3] ^</b>	<b>0.0050</b>		mg/kg dry	1	0.0003	0.0010	1D14017	EPA 8260B	04/15/11 02:19	GMB	
Chloroform [67-66-3] ^	0.0003	U	mg/kg dry	1	0.0003	0.0010	1D14017	EPA 8260B	04/15/11 02:19	GMB	
Chloromethane [74-87-3] ^	0.0001	U	mg/kg dry	1	0.0001	0.0010	1D14017	EPA 8260B	04/15/11 02:19	GMB	
<b>cis-1,2-Dichloroethene [156-59-2] ^</b>	<b>0.054</b>		mg/kg dry	1	0.0002	0.0010	1D14017	EPA 8260B	04/15/11 02:19	GMB	
cis-1,3-Dichloropropene [10061-01-5] ^	0.0003	U	mg/kg dry	1	0.0003	0.0010	1D14017	EPA 8260B	04/15/11 02:19	GMB	
Dibromochloromethane [124-48-1] ^	0.0004	U	mg/kg dry	1	0.0004	0.0010	1D14017	EPA 8260B	04/15/11 02:19	GMB	
Dibromomethane [74-95-3] ^	0.0003	U	mg/kg dry	1	0.0003	0.0010	1D14017	EPA 8260B	04/15/11 02:19	GMB	
Dichlorodifluoromethane [75-71-8] ^	0.0002	U	mg/kg dry	1	0.0002	0.0010	1D14017	EPA 8260B	04/15/11 02:19	GMB	
<b>Ethylbenzene [100-41-4] ^</b>	<b>0.0006</b>	I	mg/kg dry	1	0.0006	0.0010	1D14017	EPA 8260B	04/15/11 02:19	GMB	
Hexachlorobutadiene [87-68-3] ^	0.0006	U	mg/kg dry	1	0.0006	0.0021	1D14017	EPA 8260B	04/15/11 02:19	GMB	
Isopropylbenzene [98-82-8] ^	0.0005	U	mg/kg dry	1	0.0005	0.0010	1D14017	EPA 8260B	04/15/11 02:19	GMB	
m,p-Xylenes [108-38-3/106-42-3] ^	0.0011	U	mg/kg dry	1	0.0011	0.0021	1D14017	EPA 8260B	04/15/11 02:19	GMB	
Methylene Chloride [75-09-2] ^	0.0021	U	mg/kg dry	1	0.0021	0.0021	1D14017	EPA 8260B	04/15/11 02:19	GMB	

**Description:** Soil-1

**Lab Sample ID:** B101800-10

**Received:** 04/13/11 08:45

**Matrix:** Soil

**Sampled:** 04/12/11 11:25

**Work Order:** B101800

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**% Solids:** 79.01

### Volatile Organic Compounds by GCMS

<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Methyl-tert-Butyl Ether [1634-04-4] ^	0.0003	U	mg/kg dry	1	0.0003	0.0010	1D14017	EPA 8260B	04/15/11 02:19	GMB	
Naphthalene [91-20-3] ^	0.0003	U	mg/kg dry	1	0.0003	0.0010	1D14017	EPA 8260B	04/15/11 02:19	GMB	
n-Butyl Benzene [104-51-8] ^	0.0006	U	mg/kg dry	1	0.0006	0.0010	1D14017	EPA 8260B	04/15/11 02:19	GMB	
n-Propyl Benzene [103-65-1] ^	0.0006	U	mg/kg dry	1	0.0006	0.0010	1D14017	EPA 8260B	04/15/11 02:19	GMB	
o-Xylene [95-47-6] ^	0.0003	U	mg/kg dry	1	0.0003	0.0010	1D14017	EPA 8260B	04/15/11 02:19	GMB	
sec-Butylbenzene [135-98-8] ^	0.0005	U	mg/kg dry	1	0.0005	0.0010	1D14017	EPA 8260B	04/15/11 02:19	GMB	
Styrene [100-42-5] ^	0.0004	U	mg/kg dry	1	0.0004	0.0010	1D14017	EPA 8260B	04/15/11 02:19	GMB	
tert-Butylbenzene [98-06-6] ^	0.0005	U	mg/kg dry	1	0.0005	0.0010	1D14017	EPA 8260B	04/15/11 02:19	GMB	
Tetrachloroethene [127-18-4] ^	0.0007	U	mg/kg dry	1	0.0007	0.0021	1D14017	EPA 8260B	04/15/11 02:19	GMB	
Toluene [108-88-3] ^	<b>0.047</b>		mg/kg dry	1	0.0005	0.0010	1D14017	EPA 8260B	04/15/11 02:19	GMB	
trans-1,2-Dichloroethene [156-60-5] ^	<b>0.0069</b>		mg/kg dry	1	0.0003	0.0010	1D14017	EPA 8260B	04/15/11 02:19	GMB	
trans-1,3-Dichloropropene [10061-02-6] ^	0.0003	U	mg/kg dry	1	0.0003	0.0010	1D14017	EPA 8260B	04/15/11 02:19	GMB	
Trichloroethene [79-01-6] ^	<b>0.0024</b>		mg/kg dry	1	0.0004	0.0010	1D14017	EPA 8260B	04/15/11 02:19	GMB	
Trichlorofluoromethane [75-69-4] ^	0.0001	U	mg/kg dry	1	0.0001	0.0010	1D14017	EPA 8260B	04/15/11 02:19	GMB	
Vinyl chloride [75-01-4] ^	<b>0.0061</b>		mg/kg dry	1	0.0005	0.0010	1D14017	EPA 8260B	04/15/11 02:19	GMB	
Xylenes (Total) [1330-20-7] ^	0.0011	U	mg/kg dry	1	0.0011	0.0021	1D14017	EPA 8260B	04/15/11 02:19	GMB	
<b>Surrogates</b>											
4-Bromofluorobenzene	<b>0.050</b>	<b>1</b>	<b>0.0513</b>	<b>98 %</b>	<b>64-147</b>		1D14017	EPA 8260B	04/15/11 02:19	GMB	
Dibromofluoromethane	<b>0.059</b>	<b>1</b>	<b>0.0513</b>	<b>114 %</b>	<b>65-146</b>		1D14017	EPA 8260B	04/15/11 02:19	GMB	
Toluene-d8	<b>0.066</b>	<b>1</b>	<b>0.0513</b>	<b>129 %</b>	<b>80-129</b>		1D14017	EPA 8260B	04/15/11 02:19	GMB	



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**Description:** Trip Blank 1**Lab Sample ID:** B101800-11**Received:** 04/13/11 08:45**Matrix:** Water**Sampled:** 04/12/11 00:00**Work Order:** B101800**Project:** Cooper Tools**Sampled By:** Lab**Volatile Organic Compounds by GCMS**<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	POL	Batch	Method	Analyzed	By	Notes
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.20	U	ug/L	1	0.20	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
1,1,1-Trichloroethane [71-55-6] ^	0.20	U	ug/L	1	0.20	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.32	U	ug/L	1	0.32	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
1,1,2-Trichloroethane [79-00-5] ^	0.40	U	ug/L	1	0.40	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
1,1-Dichloroethane [75-34-3] ^	0.30	U	ug/L	1	0.30	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
1,1-Dichloropropene [563-58-6] ^	0.21	U	ug/L	1	0.21	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
1,2,3-Trichlorobenzene [87-61-6] ^	0.50	U	ug/L	1	0.50	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
1,2,3-Trichloropropane [96-18-4] ^	0.30	U	ug/L	1	0.30	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
1,2,4-Trichlorobenzene [120-82-1] ^	0.41	U	ug/L	1	0.41	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
1,2,4-Trimethylbenzene [95-63-6] ^	0.28	U	ug/L	1	0.28	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.60	U	ug/L	1	0.60	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
1,2-Dibromoethane [106-93-4] ^	0.27	U	ug/L	1	0.27	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
1,2-Dichlorobenzene [95-50-1] ^	0.24	U	ug/L	1	0.24	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
1,2-Dichloroethane [107-06-2] ^	0.28	U	ug/L	1	0.28	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
1,2-Dichloropropane [78-87-5] ^	0.30	U	ug/L	1	0.30	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
1,3,5-Trimethylbenzene [108-67-8] ^	0.26	U	ug/L	1	0.26	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
1,3-Dichlorobenzene [541-73-1] ^	0.27	U	ug/L	1	0.27	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
1,3-Dichloropropane [142-28-9] ^	0.25	U	ug/L	1	0.25	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
1,4-Dichlorobenzene [106-46-7] ^	0.23	U	ug/L	1	0.23	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
2,2-Dichloropropane [594-20-7] ^	0.40	U	ug/L	1	0.40	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
2-Butanone [78-93-3] ^	0.38	U	ug/L	1	0.38	5.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
2-Chloroethyl Vinyl Ether [110-75-8] ^	1.5	U	ug/L	1	1.5	5.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
2-Chlorotoluene [95-49-8] ^	0.33	U	ug/L	1	0.33	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
2-Hexanone [591-78-6] ^	0.50	U	ug/L	1	0.50	5.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
4-Chlorotoluene [106-43-4] ^	0.22	U	ug/L	1	0.22	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
4-Isopropyltoluene [99-87-6] ^	0.29	U	ug/L	1	0.29	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
4-Methyl-2-pentanone [108-10-1] ^	1.0	U	ug/L	1	1.0	5.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
Acetone [67-64-1] ^	1.1	U	ug/L	1	1.1	5.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
Benzene [71-43-2] ^	0.27	U	ug/L	1	0.27	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
Bromobenzene [108-86-1] ^	0.26	U	ug/L	1	0.26	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
Bromochloromethane [74-97-5] ^	0.28	U	ug/L	1	0.28	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
Bromodichloromethane [75-27-4] ^	0.20	U	ug/L	1	0.20	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
Bromoform [75-25-2] ^	0.33	U	ug/L	1	0.33	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
Bromomethane [74-83-9] ^	0.64	U	ug/L	1	0.64	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
<b>Carbon disulfide [75-15-0] ^</b>	<b>0.54</b>	<b>IV</b>	<b>ug/L</b>	<b>1</b>	<b>0.24</b>	<b>5.0</b>	<b>1D15011</b>	<b>EPA 8260B</b>	<b>04/15/11 15:39</b>	<b>GMB</b>	J-01
Carbon tetrachloride [56-23-5] ^	0.20	U	ug/L	1	0.20	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
Chlorobenzene [108-90-7] ^	0.24	U	ug/L	1	0.24	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
Chloroethane [75-00-3] ^	0.31	U	ug/L	1	0.31	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
Chloroform [67-66-3] ^	0.21	U	ug/L	1	0.21	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
Chloromethane [74-87-3] ^	0.31	U	ug/L	1	0.31	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
cis-1,2-Dichloroethene [156-59-2] ^	0.22	U	ug/L	1	0.22	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
cis-1,3-Dichloropropene [10061-01-5] ^	0.35	U	ug/L	1	0.35	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
Dibromochloromethane [124-48-1] ^	0.27	U	ug/L	1	0.27	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
Dichlorodifluoromethane [75-71-8] ^	0.29	U	ug/L	1	0.29	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
Ethylbenzene [100-41-4] ^	0.26	U	ug/L	1	0.26	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
Hexachlorobutadiene [87-68-3] ^	0.35	U	ug/L	1	0.35	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
Isopropylbenzene [98-82-8] ^	0.20	U	ug/L	1	0.20	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
m,p-Xylenes [108-38-3/106-42-3] ^	0.50	U	ug/L	1	0.50	2.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
Methylene chloride [75-09-2] ^	0.62	U	ug/L	1	0.62	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	

**Description:** Trip Blank 1

**Lab Sample ID:** B101800-11

**Received:** 04/13/11 08:45

**Matrix:** Water

**Sampled:** 04/12/11 00:00

**Work Order:** B101800

**Project:** Cooper Tools

**Sampled By:** Lab

**Volatile Organic Compounds by GCMS**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Methyl-tert-Butyl Ether [1634-04-4] ^	0.24	U	ug/L	1	0.24	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
Naphthalene [91-20-3] ^	0.30	U	ug/L	1	0.30	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
n-Butyl Benzene [104-51-8] ^	0.28	U	ug/L	1	0.28	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
n-Propyl Benzene [103-65-1] ^	0.20	U	ug/L	1	0.20	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
o-Xylene [95-47-6] ^	0.25	U	ug/L	1	0.25	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
sec-Butylbenzene [135-98-8] ^	0.20	U	ug/L	1	0.20	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
Styrene [100-42-5] ^	0.32	U	ug/L	1	0.32	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
tert-Butylbenzene [98-06-6] ^	0.21	U	ug/L	1	0.21	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
Tetrachloroethene [127-18-4] ^	0.21	U	ug/L	1	0.21	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
Toluene [108-88-3] ^	0.30	U	ug/L	1	0.30	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
trans-1,2-Dichloroethene [156-60-5] ^	0.30	U	ug/L	1	0.30	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
trans-1,3-Dichloropropene [10061-02-6] ^	0.33	U	ug/L	1	0.33	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
Trichloroethene [79-01-6] ^	0.24	U	ug/L	1	0.24	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
Trichlorofluoromethane [75-69-4] ^	0.20	U	ug/L	1	0.20	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
Vinyl chloride [75-01-4] ^	0.33	U	ug/L	1	0.33	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
Xylenes (Total) [1330-20-7] ^	0.50	U	ug/L	1	0.50	1.0	1D15011	EPA 8260B	04/15/11 15:39	GMB	
<hr/>											
<b>Surrogates</b>	<b>Results</b>	<b>DF</b>	<b>Spike Lvl</b>	<b>% Rec</b>	<b>% Rec Limits</b>		<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
4-Bromofluorobenzene	45	1	50.0	90 %	62-132		1D15011	EPA 8260B	04/15/11 15:39	GMB	
Dibromofluoromethane	57	1	50.0	114 %	73-134		1D15011	EPA 8260B	04/15/11 15:39	GMB	
Toluene-d8	54	1	50.0	108 %	66-138		1D15011	EPA 8260B	04/15/11 15:39	GMB	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

**Description:** Trip Blank 2

**Lab Sample ID:** B101800-12

**Received:** 04/13/11 08:45

**Matrix:** Water

**Sampled:** 04/12/11 00:00

**Work Order:** B101800

**Project:** Cooper Tools

**Sampled By:** Lab

**Volatile Organic Compounds by GCMS**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>POL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
1,1,1,2-Tetrachloroethane [630-20-6] ^	0.20	U	ug/L	1	0.20	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
1,1,1-Trichloroethane [71-55-6] ^	0.20	U	ug/L	1	0.20	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
1,1,2,2-Tetrachloroethane [79-34-5] ^	0.32	U	ug/L	1	0.32	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
1,1,2-Trichloroethane [79-00-5] ^	0.40	U	ug/L	1	0.40	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
1,1-Dichloroethane [75-34-3] ^	0.30	U	ug/L	1	0.30	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
1,1-Dichloroethene [75-35-4] ^	0.21	U	ug/L	1	0.21	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
1,1-Dichloropropene [563-58-6] ^	0.21	U	ug/L	1	0.21	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
1,2,3-Trichlorobenzene [87-61-6] ^	0.50	U	ug/L	1	0.50	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
1,2,3-Trichloropropane [96-18-4] ^	0.30	U	ug/L	1	0.30	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
1,2,4-Trichlorobenzene [120-82-1] ^	0.41	U	ug/L	1	0.41	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
1,2,4-Trimethylbenzene [95-63-6] ^	0.28	U	ug/L	1	0.28	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
1,2-Dibromo-3-chloropropane [96-12-8] ^	0.60	U	ug/L	1	0.60	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
1,2-Dibromoethane [106-93-4] ^	0.27	U	ug/L	1	0.27	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
1,2-Dichlorobenzene [95-50-1] ^	0.24	U	ug/L	1	0.24	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
1,2-Dichloroethane [107-06-2] ^	0.28	U	ug/L	1	0.28	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
1,2-Dichloropropane [78-87-5] ^	0.30	U	ug/L	1	0.30	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
1,3,5-Trimethylbenzene [108-67-8] ^	0.26	U	ug/L	1	0.26	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
1,3-Dichlorobenzene [541-73-1] ^	0.27	U	ug/L	1	0.27	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
1,3-Dichloropropane [142-28-9] ^	0.25	U	ug/L	1	0.25	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
1,4-Dichlorobenzene [106-46-7] ^	0.23	U	ug/L	1	0.23	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
2,2-Dichloropropane [594-20-7] ^	0.40	U	ug/L	1	0.40	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
2-Butanone [78-93-3] ^	0.38	U	ug/L	1	0.38	5.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
2-Chloroethyl Vinyl Ether [110-75-8] ^	1.5	U	ug/L	1	1.5	5.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
2-Chlorotoluene [95-49-8] ^	0.33	U	ug/L	1	0.33	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
2-Hexanone [591-78-6] ^	0.50	U	ug/L	1	0.50	5.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
4-Chlorotoluene [106-43-4] ^	0.22	U	ug/L	1	0.22	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
4-Isopropyltoluene [99-87-6] ^	0.29	U	ug/L	1	0.29	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
4-Methyl-2-pentanone [108-10-1] ^	1.0	U	ug/L	1	1.0	5.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
Acetone [67-64-1] ^	1.1	U	ug/L	1	1.1	5.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
Benzene [71-43-2] ^	0.27	U	ug/L	1	0.27	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
Bromobenzene [108-86-1] ^	0.26	U	ug/L	1	0.26	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
Bromochloromethane [74-97-5] ^	0.28	U	ug/L	1	0.28	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
Bromodichloromethane [75-27-4] ^	0.20	U	ug/L	1	0.20	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
Bromoform [75-25-2] ^	0.33	U	ug/L	1	0.33	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
Bromomethane [74-83-9] ^	0.64	U	ug/L	1	0.64	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
<b>Carbon disulfide [75-15-0] ^</b>	<b>0.55</b>	<b>IV</b>	<b>ug/L</b>	<b>1</b>	<b>0.24</b>	<b>5.0</b>	<b>1D15011</b>	<b>EPA 8260B</b>	<b>04/15/11 15:11</b>	<b>GMB</b>	J-01
Carbon tetrachloride [56-23-5] ^	0.20	U	ug/L	1	0.20	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
Chlorobenzene [108-90-7] ^	0.24	U	ug/L	1	0.24	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
Chloroethane [75-00-3] ^	0.31	U	ug/L	1	0.31	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
Chloroform [67-66-3] ^	0.21	U	ug/L	1	0.21	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
Chloromethane [74-87-3] ^	0.31	U	ug/L	1	0.31	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
cis-1,2-Dichloroethene [156-59-2] ^	0.22	U	ug/L	1	0.22	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
cis-1,3-Dichloropropene [10061-01-5] ^	0.35	U	ug/L	1	0.35	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
Dibromochloromethane [124-48-1] ^	0.27	U	ug/L	1	0.27	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
Dibromomethane [74-95-3] ^	0.27	U	ug/L	1	0.27	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
Dichlorodifluoromethane [75-71-8] ^	0.29	U	ug/L	1	0.29	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
Ethylbenzene [100-41-4] ^	0.26	U	ug/L	1	0.26	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
Hexachlorobutadiene [87-68-3] ^	0.35	U	ug/L	1	0.35	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
Isopropylbenzene [98-82-8] ^	0.20	U	ug/L	1	0.20	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
m,p-Xylenes [108-38-3/106-42-3] ^	0.50	U	ug/L	1	0.50	2.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
Methylene chloride [75-09-2] ^	0.62	U	ug/L	1	0.62	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	

**Description:** Trip Blank 2

**Lab Sample ID:** B101800-12

**Received:** 04/13/11 08:45

**Matrix:** Water

**Sampled:** 04/12/11 00:00

**Work Order:** B101800

**Project:** Cooper Tools

**Sampled By:** Lab

**Volatile Organic Compounds by GCMS**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<b>Analyte [CAS Number]</b>	<b>Results</b>	<b>Flag</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
Methyl-tert-Butyl Ether [1634-04-4] ^	0.24	U	ug/L	1	0.24	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
Naphthalene [91-20-3] ^	0.30	U	ug/L	1	0.30	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
n-Butyl Benzene [104-51-8] ^	0.28	U	ug/L	1	0.28	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
n-Propyl Benzene [103-65-1] ^	0.20	U	ug/L	1	0.20	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
o-Xylene [95-47-6] ^	0.25	U	ug/L	1	0.25	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
sec-Butylbenzene [135-98-8] ^	0.20	U	ug/L	1	0.20	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
Styrene [100-42-5] ^	0.32	U	ug/L	1	0.32	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
tert-Butylbenzene [98-06-6] ^	0.21	U	ug/L	1	0.21	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
Tetrachloroethene [127-18-4] ^	0.21	U	ug/L	1	0.21	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
Toluene [108-88-3] ^	0.30	U	ug/L	1	0.30	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
trans-1,2-Dichloroethene [156-60-5] ^	0.30	U	ug/L	1	0.30	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
trans-1,3-Dichloropropene [10061-02-6] ^	0.33	U	ug/L	1	0.33	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
Trichloroethene [79-01-6] ^	0.24	U	ug/L	1	0.24	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
Trichlorofluoromethane [75-69-4] ^	0.20	U	ug/L	1	0.20	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
Vinyl chloride [75-01-4] ^	0.33	U	ug/L	1	0.33	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	
Xylenes (Total) [1330-20-7] ^	0.50	U	ug/L	1	0.50	1.0	1D15011	EPA 8260B	04/15/11 15:11	GMB	

<b>Surrogates</b>	<b>Results</b>	<b>DF</b>	<b>Spike Lvl</b>	<b>% Rec</b>	<b>% Rec Limits</b>	<b>Batch</b>	<b>Method</b>	<b>Analyzed</b>	<b>By</b>	<b>Notes</b>
4-Bromofluorobenzene	44	1	50.0	88 %	62-132	1D15011	EPA 8260B	04/15/11 15:11	GMB	
Dibromofluoromethane	51	1	50.0	102 %	73-134	1D15011	EPA 8260B	04/15/11 15:11	GMB	
Toluene-d8	52	1	50.0	104 %	66-138	1D15011	EPA 8260B	04/15/11 15:11	GMB	

**Description:** MW-4

**Lab Sample ID:** B101800-13

**Received:** 04/13/11 08:45

**Matrix:** Ground Water

**Sampled:** 04/12/11 15:15

**Work Order:** B101800

**Project:** Cooper Tools

**Sampled By:** Danny Hefner

**Diesel Range Organics by GC**
<sup>^</sup> - ENCO Jacksonville certified analyte [NC 442]

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>POL</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
DRO (C10-C28) [ECL-0057] ^	0.054	IV	mg/L	1	0.024	0.10	1D13022	EPA 8015C	04/15/11 02:36	JSW	J-01
<i>Surrogates</i>	<i>Results</i>	<i>DF</i>	<i>Spike Lvl</i>	<i>% Rec</i>	<i>% Rec Limits</i>		<i>Batch</i>	<i>Method</i>	<i>Analyzed</i>	<i>By</i>	<i>Notes</i>
<i>o-Terphenyl</i>	0.051	1	0.0500	102 %	63-139		1D13022	EPA 8015C	04/15/11 02:36	JSW	

**Description:** MW-4**Lab Sample ID:** B101800-13**Received:** 04/13/11 08:45**Matrix:** Ground Water**Sampled:** 04/12/11 15:15**Work Order:** B101800**Project:** Cooper Tools**Sampled By:** Danny Hefner**Classical Chemistry Parameters***^ - ENCO Jacksonville certified analyte [NC 442]*

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	POL	Batch	Method	Analyzed	By	Notes
Oil & Grease (HEM) [C-0007] ^	3.07	I	mg/L	1	3.00	5.00	ID14007	EPA 1664A	04/18/11 10:43	MJF	

### QUALITY CONTROL

**Gasoline Range Organics by GC - Quality Control**

Batch 1D18016 - EPA 5030B

**Blank (1D18016-BLK1)**

Prepared: 04/18/2011 10:04 Analyzed: 04/18/2011 11:28

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
GRO (C6-C10)	0.011	U	0.055	mg/L							
Surrogate: 2,5-Dibromotoluene	0.0905			mg/L	0.100		90	70-130			

**LCS (1D18016-BS1)**

Prepared: 04/18/2011 10:04 Analyzed: 04/18/2011 11:59

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
GRO (C6-C10)	0.482		0.055	mg/L	0.500		96	58-152			
Surrogate: 2,5-Dibromotoluene	0.0938			mg/L	0.100		94	70-130			

**Matrix Spike (1D18016-MS1)**

Prepared: 04/18/2011 10:04 Analyzed: 04/18/2011 22:26

Source: C104502-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
GRO (C6-C10)	0.466		0.055	mg/L	0.500	0.011 U	93	20-185			
Surrogate: 2,5-Dibromotoluene	0.0812			mg/L	0.100		81	70-130			

**Matrix Spike Dup (1D18016-MSD1)**

Prepared: 04/18/2011 10:04 Analyzed: 04/18/2011 22:58

Source: C104502-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
GRO (C6-C10)	0.504		0.055	mg/L	0.500	0.011 U	101	20-185	8	26	
Surrogate: 2,5-Dibromotoluene	0.0823			mg/L	0.100		82	70-130			

**Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control**

Batch 1D14028 - EPA 3005A

**Blank (1D14028-BLK1)**

Prepared: 04/14/2011 13:02 Analyzed: 04/18/2011 09:56

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	0.220	U	2.00	ug/L							
Thallium	0.110	U	1.00	ug/L							

**LCS (1D14028-BS1)**

Prepared: 04/14/2011 13:02 Analyzed: 04/18/2011 10:00

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	25.3		2.00	ug/L	25.0		101	80-120			
Thallium	26.1		1.00	ug/L	25.0		104	80-120			

**LCS Dup (1D14028-BSD1)**

Prepared: 04/14/2011 13:02 Analyzed: 04/18/2011 10:04

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	25.6		2.00	ug/L	25.0		102	80-120	1	20	
Thallium	26.2		1.00	ug/L	25.0		105	80-120	0.4	20	

**Post Spike (1D14028-PS1)**

Prepared: 04/14/2011 13:02 Analyzed: 04/18/2011 10:11

### QUALITY CONTROL

**Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control**


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Batch 1D14028 - EPA 3005A

**Post Spike (1D14028-PS1) Continued**

Prepared: 04/14/2011 13:02 Analyzed: 04/18/2011 10:11

**Source: C104668-01**

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	24.5		2.00	ug/L	25.0	0.0390	98	80-120			
Thallium	25.1		1.00	ug/L	25.0	0.130	100	80-120			

### QUALITY CONTROL

**Volatile Organic Compounds by GCMS - Quality Control**


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Batch 1D12021 - EPA 5030B\_MS

**Blank (1D12021-BLK1)**

Prepared: 04/12/2011 18:05 Analyzed: 04/13/2011 18:43

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1,2-Tetrachloroethane	0.20	U	1.0	ug/L							
1,1,1-Trichloroethane	0.20	U	1.0	ug/L							
1,1,2,2-Tetrachloroethane	0.32	U	1.0	ug/L							
1,1,2-Trichloroethane	0.40	U	1.0	ug/L							
1,1-Dichloroethane	0.30	U	1.0	ug/L							
1,1-Dichloroethene	0.21	U	1.0	ug/L							
1,1-Dichloropropene	0.21	U	1.0	ug/L							
1,2,3-Trichlorobenzene	0.50	U	1.0	ug/L							
1,2,3-Trichloropropane	0.30	U	1.0	ug/L							
1,2,4-Trichlorobenzene	0.41	U	1.0	ug/L							
1,2,4-Trimethylbenzene	0.28	U	1.0	ug/L							
1,2-Dibromo-3-chloropropane	0.60	U	1.0	ug/L							
1,2-Dibromoethane	0.27	U	1.0	ug/L							
1,2-Dichlorobenzene	0.24	U	1.0	ug/L							
1,2-Dichloroethane	0.28	U	1.0	ug/L							
1,2-Dichloropropane	0.30	U	1.0	ug/L							
1,3,5-Trimethylbenzene	0.26	U	1.0	ug/L							
1,3-Dichlorobenzene	0.27	U	1.0	ug/L							
1,3-Dichloropropane	0.25	U	1.0	ug/L							
1,4-Dichlorobenzene	0.23	U	1.0	ug/L							
2,2-Dichloropropane	0.40	U	1.0	ug/L							
2-Butanone	0.38	U	5.0	ug/L							
2-Chloroethyl Vinyl Ether	1.5	U	5.0	ug/L							
2-Chlorotoluene	0.33	U	1.0	ug/L							
2-Hexanone	0.50	U	5.0	ug/L							
4-Chlorotoluene	0.22	U	1.0	ug/L							
4-Isopropyltoluene	0.29	U	1.0	ug/L							
4-Methyl-2-pentanone	1.0	U	5.0	ug/L							
<b>Acetone</b>	<b>2.6</b>	<b>I</b>	<b>5.0</b>	<b>ug/L</b>							
Benzene	0.27	U	1.0	ug/L							
Bromobenzene	0.26	U	1.0	ug/L							
Bromochloromethane	0.28	U	1.0	ug/L							
Bromodichloromethane	0.20	U	1.0	ug/L							
Bromoform	0.33	U	1.0	ug/L							
Bromomethane	0.64	U	1.0	ug/L							
<b>Carbon disulfide</b>	<b>0.35</b>	<b>I</b>	<b>5.0</b>	<b>ug/L</b>							
Carbon tetrachloride	0.20	U	1.0	ug/L							

### QUALITY CONTROL

**Volatile Organic Compounds by GCMS - Quality Control**

Batch 1D12021 - EPA 5030B\_MS

**Blank (1D12021-BLK1) Continued**

Prepared: 04/12/2011 18:05 Analyzed: 04/13/2011 18:43

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chlorobenzene	0.24	U	1.0	ug/L							
Chloroethane	0.31	U	1.0	ug/L							
Chloroform	0.21	U	1.0	ug/L							
Chloromethane	0.31	U	1.0	ug/L							
cis-1,2-Dichloroethene	0.22	U	1.0	ug/L							
cis-1,3-Dichloropropene	0.35	U	1.0	ug/L							
Dibromochloromethane	0.27	U	1.0	ug/L							
Dibromomethane	0.27	U	1.0	ug/L							
Dichlorodifluoromethane	0.29	U	1.0	ug/L							
Ethylbenzene	0.26	U	1.0	ug/L							
Hexachlorobutadiene	0.35	U	1.0	ug/L							
Isopropylbenzene	0.20	U	1.0	ug/L							
m,p-Xylenes	0.50	U	2.0	ug/L							
Methylene chloride	0.62	U	1.0	ug/L							
Methyl-tert-Butyl Ether	0.24	U	1.0	ug/L							
Naphthalene	0.30	U	1.0	ug/L							
n-Butyl Benzene	0.28	U	1.0	ug/L							
n-Propyl Benzene	0.20	U	1.0	ug/L							
o-Xylene	0.25	U	1.0	ug/L							
sec-Butylbenzene	0.20	U	1.0	ug/L							
Styrene	0.32	U	1.0	ug/L							
tert-Butylbenzene	0.21	U	1.0	ug/L							
Tetrachloroethene	0.21	U	1.0	ug/L							
Toluene	0.30	U	1.0	ug/L							
trans-1,2-Dichloroethene	0.30	U	1.0	ug/L							
trans-1,3-Dichloropropene	0.33	U	1.0	ug/L							
Trichloroethene	0.24	U	1.0	ug/L							
Trichlorofluoromethane	0.20	U	1.0	ug/L							
Vinyl chloride	0.33	U	1.0	ug/L							
Xylenes (Total)	0.50	U	1.0	ug/L							
Surrogate: 4-Bromofluorobenzene	44			ug/L	50.0		88	62-132			
Surrogate: Dibromofluoromethane	48			ug/L	50.0		97	73-134			
Surrogate: Toluene-d8	48			ug/L	50.0		96	66-138			

**LCS (1D12021-BS1)**

Prepared: 04/12/2011 18:05 Analyzed: 04/13/2011 21:04

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	15		1.0	ug/L	20.0		77	51-145			
Benzene	17		1.0	ug/L	20.0		86	76-120			
Chlorobenzene	18		1.0	ug/L	20.0		92	80-124			
Toluene	17		1.0	ug/L	20.0		84	78-120			
Trichloroethene	18		1.0	ug/L	20.0		88	80-120			
Surrogate: 4-Bromofluorobenzene	47			ug/L	50.0		94	62-132			
Surrogate: Dibromofluoromethane	50			ug/L	50.0		101	73-134			
Surrogate: Toluene-d8	51			ug/L	50.0		103	66-138			

**Matrix Spike (1D12021-MS1)**

Prepared: 04/12/2011 18:05 Analyzed: 04/13/2011 21:31

### QUALITY CONTROL

**Volatile Organic Compounds by GCMS - Quality Control**

Batch 1D12021 - EPA 5030B\_MS

**Matrix Spike (1D12021-MS1) Continued**

Prepared: 04/12/2011 18:05 Analyzed: 04/13/2011 21:31

**Source: B101652-01RE1**

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	44		1.0	ug/L	20.0	39	29	51-145			QM-07
Benzene	17		1.0	ug/L	20.0	0.27 U	86	76-120			
Chlorobenzene	18		1.0	ug/L	20.0	0.24 U	91	80-124			
Toluene	17		1.0	ug/L	20.0	0.30 U	83	78-120			
Trichloroethene	18		1.0	ug/L	20.0	0.61	89	80-120			
Surrogate: 4-Bromofluorobenzene	470			ug/L	500		95	62-132			
Surrogate: Dibromofluoromethane	500			ug/L	500		99	73-134			
Surrogate: Toluene-d8	510			ug/L	500		103	66-138			

**Matrix Spike Dup (1D12021-MSD1)**

Prepared: 04/12/2011 18:05 Analyzed: 04/13/2011 21:59

**Source: B101652-01RE1**

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	45		1.0	ug/L	20.0	39	34	51-145	2	16	QM-07
Benzene	17		1.0	ug/L	20.0	0.27 U	84	76-120	3	17	
Chlorobenzene	19		1.0	ug/L	20.0	0.24 U	94	80-124	3	19	
Toluene	17		1.0	ug/L	20.0	0.30 U	86	78-120	3	24	
Trichloroethene	19		1.0	ug/L	20.0	0.61	92	80-120	2	18	
Surrogate: 4-Bromofluorobenzene	460			ug/L	500		93	62-132			
Surrogate: Dibromofluoromethane	480			ug/L	500		96	73-134			
Surrogate: Toluene-d8	490			ug/L	500		99	66-138			

Batch 1D14017 - EPA 5035\_MS

**Blank (1D14017-BLK1)**

Prepared: 04/14/2011 15:55 Analyzed: 04/14/2011 19:47

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1,2-Tetrachloroethane	0.0005	U	0.0010	mg/kg wet							
1,1,1-Trichloroethane	0.0003	U	0.0010	mg/kg wet							
1,1,2,2-Tetrachloroethane	0.0003	U	0.0010	mg/kg wet							
1,1,2-Trichloroethane	0.0004	U	0.0010	mg/kg wet							
1,1-Dichloroethane	0.0004	U	0.0010	mg/kg wet							
1,1-Dichloroethene	0.0005	U	0.0010	mg/kg wet							
1,1-Dichloropropene	0.0001	U	0.0010	mg/kg wet							
1,2,3-Trichlorobenzene	0.0003	U	0.0010	mg/kg wet							
1,2,3-Trichloropropane	0.0003	U	0.0010	mg/kg wet							
1,2,4-Trichlorobenzene	0.0002	U	0.0010	mg/kg wet							
1,2,4-Trimethylbenzene	0.0005	U	0.0010	mg/kg wet							
1,2-Dibromo-3-chloropropane	0.0004	U	0.0010	mg/kg wet							
1,2-Dibromoethane	0.0004	U	0.0010	mg/kg wet							
1,2-Dichlorobenzene	0.0005	U	0.0010	mg/kg wet							
1,2-Dichloroethane	0.0004	U	0.0010	mg/kg wet							
1,2-Dichloropropane	0.0003	U	0.0010	mg/kg wet							
1,3,5-Trimethylbenzene	0.0005	U	0.0010	mg/kg wet							
1,3-Dichlorobenzene	0.0005	U	0.0010	mg/kg wet							
1,3-Dichloropropane	0.0003	U	0.0010	mg/kg wet							

**QUALITY CONTROL****Volatile Organic Compounds by GCMS - Quality Control**

Batch 1D14017 - EPA 5035\_MS

**Blank (1D14017-BLK1) Continued**

Prepared: 04/14/2011 15:55 Analyzed: 04/14/2011 19:47

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,4-Dichlorobenzene	0.0005	U	0.0010	mg/kg wet							
2,2-Dichloropropane	0.0002	U	0.0010	mg/kg wet							
2-Butanone	0.0026	U	0.0050	mg/kg wet							
2-Chloroethyl Vinyl Ether	0.0014	U	0.0050	mg/kg wet							
2-Chlorotoluene	0.0005	U	0.0010	mg/kg wet							
2-Hexanone	0.0008	U	0.0050	mg/kg wet							
4-Chlorotoluene	0.0004	U	0.0010	mg/kg wet							
4-Isopropyltoluene	0.0005	U	0.0010	mg/kg wet							
4-Methyl-2-pentanone	0.0026	U	0.0050	mg/kg wet							
<b>Acetone</b>	<b>0.0054</b>	<b>I</b>	0.010	mg/kg wet							0-01
Benzene	0.0003	U	0.0010	mg/kg wet							
Bromobenzene	0.0004	U	0.0010	mg/kg wet							
Bromochloromethane	0.0006	U	0.0010	mg/kg wet							
Bromodichloromethane	0.0002	U	0.0010	mg/kg wet							
Bromoform	0.0002	U	0.0010	mg/kg wet							
Bromomethane	0.0004	U	0.0010	mg/kg wet							
Carbon disulfide	0.0011	U	0.0050	mg/kg wet							
Carbon Tetrachloride	0.0002	U	0.0010	mg/kg wet							
Chlorobenzene	0.0003	U	0.0010	mg/kg wet							
Chloroethane	0.0003	U	0.0010	mg/kg wet							
Chloroform	0.0003	U	0.0010	mg/kg wet							
Chloromethane	0.0001	U	0.0010	mg/kg wet							
cis-1,2-Dichloroethene	0.0002	U	0.0010	mg/kg wet							
cis-1,3-Dichloropropene	0.0003	U	0.0010	mg/kg wet							
Dibromochloromethane	0.0004	U	0.0010	mg/kg wet							
Dibromomethane	0.0003	U	0.0010	mg/kg wet							
Dichlorodifluoromethane	0.0002	U	0.0010	mg/kg wet							
Ethylbenzene	0.0006	U	0.0010	mg/kg wet							
Hexachlorobutadiene	0.0006	U	0.0020	mg/kg wet							
Isopropylbenzene	0.0004	U	0.0010	mg/kg wet							
m,p-Xylenes	0.0011	U	0.0020	mg/kg wet							
Methylene Chloride	0.0020	U	0.0020	mg/kg wet							
Methyl-tert-Butyl Ether	0.0003	U	0.0010	mg/kg wet							
<b>Naphthalene</b>	<b>0.0004</b>	<b>I</b>	0.0010	mg/kg wet							
n-Butyl Benzene	0.0006	U	0.0010	mg/kg wet							
n-Propyl Benzene	0.0006	U	0.0010	mg/kg wet							
o-Xylene	0.0003	U	0.0010	mg/kg wet							
sec-Butylbenzene	0.0005	U	0.0010	mg/kg wet							
Styrene	0.0004	U	0.0010	mg/kg wet							
tert-Butylbenzene	0.0005	U	0.0010	mg/kg wet							
Tetrachloroethene	0.0007	U	0.0020	mg/kg wet							
Toluene	0.0005	U	0.0010	mg/kg wet							
trans-1,2-Dichloroethene	0.0003	U	0.0010	mg/kg wet							
trans-1,3-Dichloropropene	0.0003	U	0.0010	mg/kg wet							
Trichloroethene	0.0004	U	0.0010	mg/kg wet							
Trichlorofluoromethane	0.0001	U	0.0010	mg/kg wet							
Vinyl chloride	0.0004	U	0.0010	mg/kg wet							
Xylenes (Total)	0.0011	U	0.0020	mg/kg wet							

### QUALITY CONTROL

**Volatile Organic Compounds by GCMS - Quality Control**
*Batch 1D14017 - EPA 5035\_MS*
**Blank (1D14017-BLK1) Continued**

Prepared: 04/14/2011 15:55 Analyzed: 04/14/2011 19:47

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Surrogate: 4-Bromofluorobenzene	0.050			mg/kg wet	0.0500		100	64-147			
Surrogate: Dibromofluoromethane	0.055			mg/kg wet	0.0500		110	65-146			
Surrogate: Toluene-d8	0.058			mg/kg wet	0.0500		116	80-129			

**LCS (1D14017-BS1)**

Prepared: 04/14/2011 15:55 Analyzed: 04/14/2011 20:15

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	22		1.0	ug/L	20.0		110	65-122			
Benzene	20		1.0	ug/L	20.0		102	68-122			
Chlorobenzene	20		1.0	ug/L	20.0		101	80-120			
Toluene	18		1.0	ug/L	20.0		90	58-126			
Trichloroethene	21		1.0	ug/L	20.0		106	24-168			
Surrogate: 4-Bromofluorobenzene	0.054			mg/kg wet	0.0500		108	64-147			
Surrogate: Dibromofluoromethane	0.052			mg/kg wet	0.0500		104	65-146			
Surrogate: Toluene-d8	0.054			mg/kg wet	0.0500		108	80-129			

**Matrix Spike (1D14017-MS1)**

Prepared: 04/14/2011 15:55 Analyzed: 04/14/2011 20:43

*Source: B101839-01*

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	18		1.0	ug/L	20.0	0.52 U	91	65-122			
Benzene	22		1.0	ug/L	20.0	0.26 U	112	68-122			
Chlorobenzene	20		1.0	ug/L	20.0	0.33 U	102	80-120			
Toluene	20		1.0	ug/L	20.0	0.61	97	58-126			
Trichloroethene	23		1.0	ug/L	20.0	0.38 U	114	24-168			
Surrogate: 4-Bromofluorobenzene	0.050			mg/kg dry	0.0500		99	64-147			
Surrogate: Dibromofluoromethane	0.057			mg/kg dry	0.0500		114	65-146			
Surrogate: Toluene-d8	0.046			mg/kg dry	0.0500		92	80-129			

**Matrix Spike Dup (1D14017-MSD1)**

Prepared: 04/14/2011 15:55 Analyzed: 04/14/2011 21:11

*Source: B101839-01*

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	21		1.0	ug/L	20.0	0.52 U	105	65-122	14	39	
Benzene	17		1.0	ug/L	20.0	0.26 U	85	68-122	27	27	
Chlorobenzene	20		1.0	ug/L	20.0	0.33 U	99	80-120	3	28	
Toluene	21		1.0	ug/L	20.0	0.61	103	58-126	7	24	
Trichloroethene	21		1.0	ug/L	20.0	0.38 U	106	24-168	7	22	
Surrogate: 4-Bromofluorobenzene	0.052			mg/kg dry	0.0500		105	64-147			
Surrogate: Dibromofluoromethane	0.053			mg/kg dry	0.0500		106	65-146			
Surrogate: Toluene-d8	0.064			mg/kg dry	0.0500		128	80-129			

*Batch 1D15011 - EPA 5030B\_MS*
**Blank (1D15011-BLK1)**

Prepared: 04/15/2011 10:05 Analyzed: 04/15/2011 14:43

### QUALITY CONTROL

#### Volatile Organic Compounds by GCMS - Quality Control

Batch 1D15011 - EPA 5030B\_MS

Blank (1D15011-BLK1) Continued

Prepared: 04/15/2011 10:05 Analyzed: 04/15/2011 14:43

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,1,2-Tetrachloroethane	0.20	U	1.0	ug/L							
1,1,1-Trichloroethane	0.20	U	1.0	ug/L							
1,1,2,2-Tetrachloroethane	0.32	U	1.0	ug/L							
1,1,2-Trichloroethane	0.40	U	1.0	ug/L							
1,1-Dichloroethane	0.30	U	1.0	ug/L							
1,1-Dichloroethene	0.21	U	1.0	ug/L							
1,1-Dichloropropene	0.21	U	1.0	ug/L							
1,2,3-Trichlorobenzene	0.50	U	1.0	ug/L							
1,2,3-Trichloropropane	0.30	U	1.0	ug/L							
1,2,4-Trichlorobenzene	0.41	U	1.0	ug/L							
1,2,4-Trimethylbenzene	0.28	U	1.0	ug/L							
1,2-Dibromo-3-chloropropane	0.60	U	1.0	ug/L							
1,2-Dibromoethane	0.27	U	1.0	ug/L							
1,2-Dichlorobenzene	0.24	U	1.0	ug/L							
1,2-Dichloroethane	0.28	U	1.0	ug/L							
1,2-Dichloropropane	0.30	U	1.0	ug/L							
1,3,5-Trimethylbenzene	0.26	U	1.0	ug/L							
1,3-Dichlorobenzene	0.27	U	1.0	ug/L							
1,3-Dichloropropane	0.25	U	1.0	ug/L							
<b>1,4-Dichlorobenzene</b>	<b>0.25</b>	I	1.0	ug/L							
2,2-Dichloropropane	0.40	U	1.0	ug/L							
2-Butanone	0.38	U	5.0	ug/L							
2-Chloroethyl Vinyl Ether	1.5	U	5.0	ug/L							
2-Chlorotoluene	0.33	U	1.0	ug/L							
2-Hexanone	0.50	U	5.0	ug/L							
4-Chlorotoluene	0.22	U	1.0	ug/L							
4-Isopropyltoluene	0.29	U	1.0	ug/L							
4-Methyl-2-pentanone	1.0	U	5.0	ug/L							
<b>Acetone</b>	<b>2.8</b>	I	5.0	ug/L							0-01
Benzene	0.27	U	1.0	ug/L							
Bromobenzene	0.26	U	1.0	ug/L							
Bromoform	0.28	U	1.0	ug/L							
Bromomethane	0.20	U	1.0	ug/L							
Bromoform	0.33	U	1.0	ug/L							
Bromomethane	0.64	U	1.0	ug/L							
<b>Carbon disulfide</b>	<b>0.66</b>	I	5.0	ug/L							
Carbon tetrachloride	0.20	U	1.0	ug/L							
Chlorobenzene	0.24	U	1.0	ug/L							
Chloroethane	0.31	U	1.0	ug/L							
Chloroform	0.21	U	1.0	ug/L							
Chloromethane	0.31	U	1.0	ug/L							
cis-1,2-Dichloroethene	0.22	U	1.0	ug/L							
cis-1,3-Dichloropropene	0.35	U	1.0	ug/L							
Dibromochloromethane	0.27	U	1.0	ug/L							
Dibromomethane	0.27	U	1.0	ug/L							
Dichlorodifluoromethane	0.29	U	1.0	ug/L							
Ethylbenzene	0.26	U	1.0	ug/L							
Hexachlorobutadiene	0.35	U	1.0	ug/L							
Isopropylbenzene	0.20	U	1.0	ug/L							

### QUALITY CONTROL

**Volatile Organic Compounds by GCMS - Quality Control**

Batch 1D15011 - EPA 5030B\_MS

**Blank (1D15011-BLK1) Continued**

Prepared: 04/15/2011 10:05 Analyzed: 04/15/2011 14:43

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
m,p-Xylenes	0.50	U	2.0	ug/L							
Methylene chloride	0.62	U	1.0	ug/L							
Methyl-tert-Butyl Ether	0.24	U	1.0	ug/L							
Naphthalene	0.30	U	1.0	ug/L							
n-Butyl Benzene	0.28	U	1.0	ug/L							
n-Propyl Benzene	0.20	U	1.0	ug/L							
o-Xylene	0.25	U	1.0	ug/L							
sec-Butylbenzene	0.20	U	1.0	ug/L							
Styrene	0.32	U	1.0	ug/L							
tert-Butylbenzene	0.21	U	1.0	ug/L							
Tetrachloroethene	0.21	U	1.0	ug/L							
Toluene	0.30	U	1.0	ug/L							
<b>trans-1,2-Dichloroethene</b>	<b>0.40</b>	<b>I</b>	<b>1.0</b>	<b>ug/L</b>							
<i>trans-1,3-Dichloropropene</i>	0.33	U	1.0	ug/L							
Trichloroethene	0.24	U	1.0	ug/L							
Trichlorofluoromethane	0.20	U	1.0	ug/L							
Vinyl chloride	0.33	U	1.0	ug/L							
Xylenes (Total)	0.50	U	1.0	ug/L							
<i>Surrogate: 4-Bromofluorobenzene</i>	47			ug/L	50.0		93	62-132			
<i>Surrogate: Dibromofluoromethane</i>	50			ug/L	50.0		101	73-134			
<i>Surrogate: Toluene-d8</i>	52			ug/L	50.0		104	66-138			

**LCS (1D15011-BS1)**

Prepared: 04/15/2011 10:05 Analyzed: 04/15/2011 16:35

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	16		1.0	ug/L	20.0		80	51-145			
Benzene	18		1.0	ug/L	20.0		89	76-120			
Chlorobenzene	20		1.0	ug/L	20.0		101	80-124			
Toluene	18		1.0	ug/L	20.0		92	78-120			
Trichloroethene	19		1.0	ug/L	20.0		93	80-120			
<i>Surrogate: 4-Bromofluorobenzene</i>	46			ug/L	50.0		93	62-132			
<i>Surrogate: Dibromofluoromethane</i>	50			ug/L	50.0		100	73-134			
<i>Surrogate: Toluene-d8</i>	50			ug/L	50.0		100	66-138			

**Matrix Spike (1D15011-MS1)**

Prepared: 04/15/2011 10:05 Analyzed: 04/15/2011 17:03

Source: B101677-01RE1

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	19		1.0	ug/L	20.0	0.21 U	94	51-145			
Benzene	18		1.0	ug/L	20.0	0.27 U	91	76-120			
Chlorobenzene	20		1.0	ug/L	20.0	0.24 U	102	80-124			
Toluene	19		1.0	ug/L	20.0	0.30 U	95	78-120			
Trichloroethene	20		1.0	ug/L	20.0	0.24 U	100	80-120			
<i>Surrogate: 4-Bromofluorobenzene</i>	46			ug/L	50.0		93	62-132			
<i>Surrogate: Dibromofluoromethane</i>	52			ug/L	50.0		104	73-134			
<i>Surrogate: Toluene-d8</i>	52			ug/L	50.0		104	66-138			

### QUALITY CONTROL

#### **Volatile Organic Compounds by GCMS - Quality Control**

Batch 1D15011 - EPA 5030B\_MS

##### Matrix Spike Dup (1D15011-MSD1)

Prepared: 04/15/2011 10:05 Analyzed: 04/15/2011 17:31

Source: B101677-01RE1

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethene	16		1.0	ug/L	20.0	0.21 U	79	51-145	18	16	QM-11
Benzene	18		1.0	ug/L	20.0	0.27 U	92	76-120	0.9	17	
Chlorobenzene	21		1.0	ug/L	20.0	0.24 U	103	80-124	0.9	19	
Toluene	19		1.0	ug/L	20.0	0.30 U	94	78-120	0.8	24	
Trichloroethene	20		1.0	ug/L	20.0	0.24 U	101	80-120	0.8	18	
Surrogate: 4-Bromofluorobenzene	45			ug/L	50.0		91	62-132			
Surrogate: Dibromoformate	50			ug/L	50.0		100	73-134			
Surrogate: Toluene-d8	49			ug/L	50.0		99	66-138			

#### **Non-Halogenated Volatile Organics by GC - Quality Control**

Batch 1D15008 - NO PREP ANALYTIX

##### Blank (1D15008-BLK1)

Prepared: 04/15/2011 09:24 Analyzed: 04/15/2011 11:24

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Ethylene Glycol	4.1	U	10	mg/L							
Propylene Glycol	1.8	U	10	mg/L							
Surrogate: 1,3-Butylene Glycol	120			mg/L	99.7		118	50-150			

##### LCS (1D15008-BS1)

Prepared: 04/15/2011 09:24 Analyzed: 04/15/2011 11:35

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Ethylene Glycol	120		10	mg/L	100		116	70-130			
Propylene Glycol	110		10	mg/L	102		111	70-130			
Surrogate: 1,3-Butylene Glycol	110			mg/L	99.7		114	50-150			

##### Matrix Spike (1D15008-MS1)

Prepared: 04/15/2011 09:24 Analyzed: 04/15/2011 11:46

Source: B101652-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Ethylene Glycol	120		10	mg/L	100	4.1 U	116	70-130			
Propylene Glycol	120		10	mg/L	102	1.8 U	113	70-130			
Surrogate: 1,3-Butylene Glycol	120			mg/L	99.7		118	50-150			

##### Matrix Spike Dup (1D15008-MSD1)

Prepared: 04/15/2011 09:24 Analyzed: 04/15/2011 11:57

Source: B101652-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Ethylene Glycol	120		10	mg/L	100	4.1 U	117	70-130	0.948	25	
Propylene Glycol	110		10	mg/L	102	1.8 U	113	70-130	0.143	25	
Surrogate: 1,3-Butylene Glycol	120			mg/L	99.7		117	50-150			

#### **Diesel Range Organics by GC - Quality Control**

### QUALITY CONTROL

**Diesel Range Organics by GC - Quality Control**

Batch 1D13022 - EPA 3510C

**Blank (1D13022-BLK1)**

Prepared: 04/13/2011 14:55 Analyzed: 04/14/2011 18:01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
DRO (C10-C28)	0.026	I	0.10	mg/L							
Surrogate: o-Terphenyl	0.050			mg/L	0.0500		100	63-139			

**LCS (1D13022-BS1)**

Prepared: 04/13/2011 14:55 Analyzed: 04/14/2011 18:24

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
DRO (C10-C28)	0.89		0.10	mg/L	1.00		89	44-133			
Surrogate: o-Terphenyl	0.046			mg/L	0.0500		92	63-139			

**Matrix Spike (1D13022-MS1)**

Prepared: 04/13/2011 14:55 Analyzed: 04/14/2011 18:47

Source: B101767-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
DRO (C10-C28)	1.0		0.10	mg/L	1.00	0.062	95	44-133			
Surrogate: o-Terphenyl	0.048			mg/L	0.0500		96	63-139			

**Matrix Spike Dup (1D13022-MSD1)**

Prepared: 04/13/2011 14:55 Analyzed: 04/14/2011 19:11

Source: B101767-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
DRO (C10-C28)	0.95		0.10	mg/L	1.00	0.062	89	44-133	6	30	
Surrogate: o-Terphenyl	0.048			mg/L	0.0500		96	63-139			

**Metals by EPA 6000/7000 Series Methods - Quality Control**

Batch 1D18013 - EPA 7470A

**Blank (1D18013-BLK1)**

Prepared: 04/18/2011 15:32 Analyzed: 04/20/2011 09:22

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	0.0720	U	0.200	ug/L							

**Blank (1D18013-BLK2)**

Prepared: 04/18/2011 15:32 Analyzed: 04/20/2011 09:24

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	0.720	U	2.00	ug/L							

**Blank (1D18013-BLK3)**

Prepared: 04/18/2011 15:32 Analyzed: 04/20/2011 09:25

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	0.720	U	2.00	ug/L							

**LCS (1D18013-BS1)**

Prepared: 04/18/2011 15:32 Analyzed: 04/20/2011 09:31

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	5.28		0.200	ug/L	5.00		106	85-115			

### QUALITY CONTROL

**Metals by EPA 6000/7000 Series Methods - Quality Control**
*Batch 1D18013 - EPA 7470A*
**Matrix Spike (1D18013-MS1)**

Prepared: 04/18/2011 15:32 Analyzed: 04/20/2011 09:33

Source: B101431-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	57.8		2.00	ug/L	50.0	0.720 U	116	85-115			QM-07

**Matrix Spike Dup (1D18013-MSD1)**

Prepared: 04/18/2011 15:32 Analyzed: 04/20/2011 09:35

Source: B101431-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	58.5		2.00	ug/L	50.0	0.720 U	117	85-115	1	25	QM-07

**Post Spike (1D18013-PS1)**

Prepared: 04/18/2011 15:32 Analyzed: 04/20/2011 11:01

Source: B101311-03

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	2.81		0.200	ug/L	2.73	-0.00395	103	0-200			

**Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control**
*Batch 1D15004 - EPA 3005A*
**Blank (1D15004-BLK1)**

Prepared: 04/15/2011 08:24 Analyzed: 04/18/2011 13:22

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	6.70	U	10.0	ug/L							
Beryllium	0.100	U	1.00	ug/L							
Cadmium	0.370	U	1.00	ug/L							
Chromium	1.30	U	10.0	ug/L							
Copper	1.50	U	10.0	ug/L							
Lead	2.90	U	10.0	ug/L							
Nickel	1.10	U	10.0	ug/L							
Selenium	8.90	U	10.0	ug/L							
Silver	1.50	U	10.0	ug/L							
Zinc	14.2		10.0	ug/L							0-01

**LCS (1D15004-BS1)**

Prepared: 04/15/2011 08:24 Analyzed: 04/18/2011 13:25

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	492		10.0	ug/L	500		98	85-115			
Beryllium	51.4		1.00	ug/L	50.0		103	85-115			
Cadmium	51.2		1.00	ug/L	50.0		102	85-115			
Chromium	501		10.0	ug/L	500		100	85-115			
Copper	497		10.0	ug/L	500		99	85-115			
Lead	503		10.0	ug/L	500		101	85-115			
Nickel	502		10.0	ug/L	500		100	85-115			
Selenium	504		10.0	ug/L	500		101	85-115			
Silver	98.4		10.0	ug/L	100		98	85-115			
Zinc	525		10.0	ug/L	500		105	85-115			

### QUALITY CONTROL

#### Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control

Batch 1D15004 - EPA 3005A

##### Matrix Spike (1D15004-MS1)

Prepared: 04/15/2011 08:24 Analyzed: 04/18/2011 13:27

Source: B101806-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	535		10.0	ug/L	500	36.7	100	80-120			
Beryllium	51.9		1.00	ug/L	50.0	0.100 U	104	80-120			
Cadmium	51.7		1.00	ug/L	50.0	0.662	102	80-120			
Chromium	520		10.0	ug/L	500	23.0	99	80-120			
Copper	547		10.0	ug/L	500	51.0	99	80-120			
Lead	507		10.0	ug/L	500	12.0	99	80-120			
Nickel	558		10.0	ug/L	500	67.5	98	80-120			
Selenium	513		10.0	ug/L	500	8.90 U	103	80-120			
Silver	98.7		10.0	ug/L	100	1.50 U	99	80-120			
Zinc	556		10.0	ug/L	500	67.3	98	80-120			

##### Matrix Spike Dup (1D15004-MSD1)

Prepared: 04/15/2011 08:24 Analyzed: 04/18/2011 13:28

Source: B101806-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Arsenic	541		10.0	ug/L	500	36.7	101	80-120	1	30	
Beryllium	52.5		1.00	ug/L	50.0	0.100 U	105	80-120	1	30	
Cadmium	51.9		1.00	ug/L	50.0	0.662	103	80-120	0.5	30	
Chromium	527		10.0	ug/L	500	23.0	101	80-120	1	30	
Copper	554		10.0	ug/L	500	51.0	101	80-120	1	30	
Lead	510		10.0	ug/L	500	12.0	100	80-120	0.7	30	
Nickel	563		10.0	ug/L	500	67.5	99	80-120	1	30	
Selenium	516		10.0	ug/L	500	8.90 U	103	80-120	0.6	30	
Silver	99.5		10.0	ug/L	100	1.50 U	99	80-120	0.8	30	
Zinc	576		10.0	ug/L	500	67.3	102	80-120	3	30	

#### Classical Chemistry Parameters - Quality Control

Batch 1D13002 - Same

##### Blank (1D13002-BLK1)

Prepared: 04/13/2011 09:05 Analyzed: 04/13/2011 11:45

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Hexavalent Chromium	0.004	U	0.030	mg/L							

##### LCS (1D13002-BS1)

Prepared: 04/13/2011 09:05 Analyzed: 04/13/2011 11:45

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Hexavalent Chromium	0.28		0.030	mg/L	0.250		111	80-125			

##### Matrix Spike (1D13002-MS1)

Prepared: 04/13/2011 09:05 Analyzed: 04/13/2011 11:45

Source: B101800-08

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Hexavalent Chromium	0.28		0.030	mg/L	0.250	0.004 U	111	80-120			

### QUALITY CONTROL

#### **Classical Chemistry Parameters - Quality Control**

*Batch 1D13002 - Same*

**Matrix Spike Dup (1D13002-MSD1)**

Prepared: 04/13/2011 09:05 Analyzed: 04/13/2011 11:45

**Source: B101800-08**

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Hexavalent Chromium	0.28		0.030	mg/L	0.250	0.004 U	111	80-120	0.4	25	

*Batch 1D14007 - EPA 1664A*

**Blank (1D14007-BLK1)**

Prepared: 04/14/2011 08:51 Analyzed: 04/18/2011 10:43

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Oil & Grease (HEM)	3.00	U	5.00	mg/L							

**LCS (1D14007-BS1)**

Prepared: 04/14/2011 08:51 Analyzed: 04/18/2011 10:43

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Oil & Grease (HEM)	40.6		5.00	mg/L	41.3		98	78-114			

**Matrix Spike (1D14007-MS1)**

Prepared: 04/14/2011 08:51 Analyzed: 04/18/2011 10:43

**Source: B101767-02**

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Oil & Grease (HEM)	39.4		5.00	mg/L	40.8	3.00 U	97	78-114			

**Matrix Spike Dup (1D14007-MSD1)**

Prepared: 04/14/2011 08:51 Analyzed: 04/18/2011 10:43

**Source: B101767-02**

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Oil & Grease (HEM)	40.6		5.00	mg/L	41.0	3.00 U	99	78-114	3	18	